

# First Five-Year Review Report

for the

## Himco Dump Superfund Site Elkhart County, Indiana

US EPA RECORDS CENTER REGION 5



494446



Prepared by

**U.S. Environmental Protection Agency  
Region 5**

**CHICAGO, ILLINOIS**

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3-1-16

Date

**Cover photo:** Entrance gate to the Himco Dump Superfund Site, Elkhart County, Indiana.

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## List of Acronyms

CD	Consent Decree
CDA	Construction Debris Area
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
COCs	Contaminants of Concern
Corps	United States Army Corps of Engineers
CR	County Road
DCA	1,1-dichloroethane
ELCR	Estimated Lifetime Cancer Risk
EPA	United States Environmental Protection Agency
ERC	Environmental Restrictive Covenant
HI	Hazard Index
ICs	Institutional Controls
IDEM	Indiana Department of Environmental Management
ISBH	Indiana State Board of Health
LEL	Lower explosive limit
LTS	Long-Term Stewardship
MCLs	Maximum Contaminant Levels under the Safe Drinking Water Act
mg/L	Milligrams per liter ("parts per million")
MIMP	Methane Investigation and Monitoring Plan
MRAP	Methane Remedial Action Plan
NCP	National Contingency Plan
NPL	National Priorities List
O&M	Operation and Maintenance
ppb	Parts per billion
ppm	Parts per million
PCOR	Preliminary Close-out Report
PDI	Pre-Design groundwater Investigation
PRP	Potentially Responsible Party
PVT	Passive Vent Trenching
RA	Remedial Action
RAO	Remedial Action Objective
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RV	Recreational Vehicle
SGP	Soil Gas Probe
SVOC	Semi-Volatile Organic Compound
µg/L	Micrograms per liter ("parts per billion")
UU/UE	Unlimited Use/Unrestricted Exposure
VOC	Volatile Organic Compound

## **Executive Summary**

The United States Environmental Protection Agency (EPA), in consultation with the Indiana Department of Environmental Management (IDEM), has completed the first Five-Year Review (FYR) at the Himco Dump Superfund site in Elkhart County, Indiana (site). The purpose of this FYR is to determine if the remedy implemented at the site is and will continue to be protective of human health and the environment. The triggering action for this statutory FYR is the initiation of construction of the remedial action on March 21, 2011.

The 60-acre Himco Dump Site is located at the intersection of County Road 10 (CR 10) and John Weaver Parkway in Cleveland Township, Elkhart County, Indiana (see Figure 1, following page), and encompasses a closed, unlicensed landfill formerly operated by Himco Waste Away Services, Inc. (Himco), a 4-acre construction debris area (CDA), as well as portions of the backyards of eight residences which abut the CDA. The contaminant source area of the site is the landfill, which began operations in 1960 and accepted for disposal household refuse, construction rubble, medical waste, and calcium sulfate. Himco closed the landfill in 1976 and covered it with about one foot of sand overlying a layer of calcium sulfate. The landfill is fenced and is surrounded by a mix of agricultural, residential and commercial/light industrial parcels. EPA also determined that private wells in this area were impacted by landfill leachate.

In September 1993, EPA completed a remedial investigation and feasibility study (RI/FS) and issued a Record of Decision (ROD) to select a final cleanup remedy for the contamination at the site. Based on new information, EPA amended the 1993 ROD in September 2004. The selected remedy for the site, as amended, requires: (1) enhancing the soil cover over the landfill to ensure that it is at least 18 inches thick; (2) installing a landfill gas management system; (3) removing debris and contaminated material from the CDA; (4) abandoning the private drinking water wells of 39 homes located east and southeast of the site and providing an alternate drinking water supply; (5) implementing a long-term groundwater monitoring program; and (6) implementing institutional controls (ICs) on the site and certain private parcels in the area to limit future use and prohibit installing groundwater wells.

In November 2007, EPA entered into a remedial design/remedial action (RD/RA) consent decree (CD) with a potentially responsible party (PRP), Bayer Healthcare, L.L.C. (Bayer). In accordance with the CD, Bayer began constructing the remedy on March 21, 2011 and completed it in June 2012. EPA issued a Preliminary Closeout Report (PCOR) on July 19, 2012. Subsequently, Bayer began the operation and maintenance (O&M) phase of the remedy.

The remedy at the Himco Dump site currently protects human health and the environment because it is functioning as intended in accordance with the decision documents. Municipal water has been provided to impacted residences, the soil cover on and the passive gas venting system in the landfill are operating and functioning as designed, and the PRP is implementing the long-term groundwater monitoring program. ICs in the form of Environmental Restrictive Covenants (ERCs) have been recorded on the landfill property and on impacted residential properties to the east and south of the landfill. However, in order for the remedy to be protective in the long term, six additional ERCs should be signed and recorded. Also, the PRP should implement a Long-Term Stewardship (LTS) plan within the existing O&M Plan to include

procedures for monitoring and tracking compliance with ICs, communicating with EPA, and providing an annual certification to EPA that ICs remain in place and are effective.

Because hazardous substances, pollutants, or contaminants remain in place at the site above levels that allow for unlimited use and unrestricted exposure (UU/UE), EPA plans to conduct a second FYR at the Himco site no later than five years after the signature date of this report.

# Site Location

Superfund  
U.S. Environmental Protection Agency

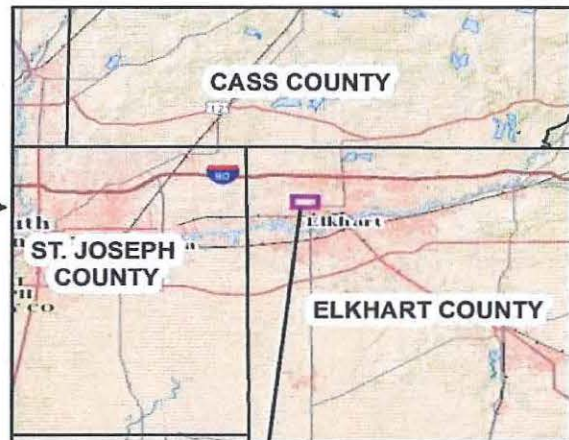


## Himco Dump Elkhart County, IN

EPA ID #IND980500292



State



County



### Legend

Property Boundary



Figure 1

Site

Produced by D.Rebot  
U.S. EPA Region 5 on October 1, 2015  
Image Source: Bing Basemaps

EPA Disclaimer: Please be advised that areas depicted in the map have been estimated based on parcel data.



## Five-Year Review Summary Form

SITE IDENTIFICATION		
<b>Site Name:</b> Himco Dump		
<b>EPA ID:</b> IND980500292		
<b>Region:</b> 5	<b>State:</b> IN	<b>City/County:</b> Elkhart/Elkhart County
<b>NPL Status:</b> Final		
<b>Multiple OUs?</b> No	<b>Has the site achieved construction completion?</b> Yes	
<b>Lead agency:</b> EPA		
<b>Author name (Federal or State Project Manager):</b> Ross del Rosario		
<b>Author affiliation:</b> EPA – Region 5		
<b>Review period:</b> 3/4/2015		
<b>Date of site inspection:</b> 6/30/2015		
<b>Type of review:</b> Statutory		
<b>Review number:</b> 1		
<b>Triggering action date:</b> 3/21/2011		
<b>Due date (five years after triggering action date):</b> 3/21/2016		

Issues and Recommendations Identified in the FYR Report				
<b>OU(s):</b> OU1/Sitewide	<b>Issue Category:</b> Institutional Controls			
	<b>Issue:</b> Six ERCs (five offsite and one onsite) remain to be signed and recorded.			
	<b>Recommendation:</b> Obtain signatures on and record the remaining ERCs.			
<b>Affect Current Protectiveness</b>	<b>Affect Future Protectiveness</b>	<b>Party Responsible</b>	<b>Oversight Party</b>	<b>Milestone Date</b>
No	Yes	PRP	EPA/State	3/21/2017

<b>OU(s):</b> OU1/Site-wide	<b>Issue Category: Institutional Controls</b>			
	<b>Issue:</b> LTS procedures are needed to ensure that effective ICs are monitored, maintained and enforced.			
	<b>Recommendation:</b> Develop and implement an LTS plan within the existing site O&M Plan to include procedures for monitoring and tracking compliance with existing ICs, communicating with EPA, and providing an annual certification to EPA that the ICs remain in place and are effective.			
<b>Affect Current Protectiveness</b>	<b>Affect Future Protectiveness</b>	<b>Party Responsible</b>	<b>Oversight Party</b>	<b>Milestone Date</b>
No	Yes	PRP	EPA/State	3/21/2017

### OU1 and Sitewide Protectiveness Statement

*Protectiveness Determination:*

Short-term Protective

*Protectiveness Statement:*

The remedy at the Himco Dump site currently protects human health and the environment because it is functioning as intended in accordance with the decision documents. Municipal water has been provided to impacted residences, the soil cover on and the passive gas venting system in the landfill are operating and functioning as designed, and the PRP is implementing the long-term groundwater monitoring program. ICs in the form of ERCs have been recorded on the landfill property and on impacted residential properties to the east and south of the landfill. However, in order for the remedy to be protective in the long term, six additional ERCs should be signed and recorded. Also, the PRP should implement a LTS plan within the existing O&M Plan to include procedures for monitoring and tracking compliance with ICs, communicating with EPA, and providing an annual certification to EPA that ICs remain in place and are effective.

## Five-Year Review Report

### I. Introduction

The purpose of a FYR is to determine whether the remedy at a site is protective of human health and the environment. The methods, findings, and conclusions of reviews are documented in FYR reports. In addition, FYR reports identify issues found during the review, if any, and identify recommendations to address them.

EPA prepared this FYR report pursuant to CERCLA §121 and the National Contingency Plan (NCP). CERCLA §121 states:

*If the President selects a remedial action that results in any hazardous substances, pollutants, or contaminants remaining at the site, the President shall review such remedial action no less often than each five years after the initiation of such remedial action to assure that human health and the environment are being protected by the remedial action being implemented. In addition, if upon such review it is the judgment of the President that action is appropriate at such site in accordance with Section 104 or 106, the President shall take or require such action. The President shall report to the Congress a list of facilities for which such review is required, the results of all such reviews, and any actions taken as a result of such reviews.*

The Agency interpreted this requirement further in the NCP; 40 CFR §300.430(f)(4)(ii) states:

*If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above such levels that allow for unlimited use and unrestricted exposure, the lead agency shall review such action no less often than every five years after the initiation of the selected remedial action.*

EPA conducted a FYR of the remedy implemented at the Himco Dump Superfund Site in Elkhart County, Indiana. EPA is the lead agency for developing and implementing the remedy for the site and IDEM is the support agency representing the State of Indiana. IDEM has reviewed supporting documentation and provided input to EPA during the FYR process.

This is the first FYR for the site. The triggering action for this statutory review is the date of the start of remedy construction that began on March 21, 2011. The FYR is required because hazardous substances, pollutants, or contaminants remain at the site above levels that allow for UU/UE. This is a site-wide FYR, under a single operable unit (OU).

EPA and IDEM will place the completed FYR report in the site files and at the local site information repository at the Elkhart Public Library, 2400 Benham Ave, Elkhart, Indiana.



## II. Site Chronology

Table 1 provides a brief chronology of major site events.

**Table 1: Chronology of Site Events**

Event	Date
Initial discovery of problem or contamination	1974
Pre-National Priorities List (NPL) response actions	1981 and 1984
NPL listing	February 21, 1990
Removal actions taken	November 1991 and May 1992
RI/FS completed	September 1993
ROD signed	September 30, 1993
Pre-Remedial design groundwater investigation started	April 1995
ROD Amendment signed	September 14, 2004
RD/RA CD entered	November 28, 2007
Remedial design started	January 2008
Remedial design completed	June 2010
Remedial action - start of construction	March 21, 2011
Construction completed	June 2012
PCOR signed	July 19, 2012

## III. Background

### Physical Characteristics

The 60-acre Himco Dump site contains an unlicensed and now-closed landfill that is located at the intersection of CR 10 and John Weaver Parkway, in Cleveland Township, Elkhart County, Indiana (see Figure 1). The landfill is bordered to the north by a quarry pond and agricultural lands, John Weaver Parkway and a residential area to the east, CR 10 and a residential area to the south, and undeveloped land/agricultural properties to the west.

The site is located within the St. Joseph River basin and was originally a mixture of marsh and grassland, but was not in an environmentally sensitive area. A thick sequence of glacial outwash deposits consisting primarily of outwash sands and gravel that contain both minor lenses of silt and clay reflect the geology of the area. Regional groundwater flows south/southeasterly towards the St. Joseph River at depths ranging from 5 to 20 feet below ground surface.



## **Land and Resource Use**

The site is primarily urban due to its close proximity to the City of Elkhart with its mix of commercial/industrial and residential properties. Elkhart County has a population of about 197,000, which has grown rapidly over the past several decades mostly due to growth in the local recreational vehicle (RV) industry. The City of Elkhart, in which a small part of the site is located, has a population of approximately 51,000, with a population density of 2,170 persons/square mile. Due to the previous landfill operations at the site and the reuse restrictions put on the site property by the ICs, it is anticipated that reuse of the site would be limited to recreational and/or commercial purposes (e.g., soccer/baseball fields, RV parking lot). Elkhart prepared an economic development plan in 2003 that included plans for potential redevelopment of the site, which included construction of recreational facilities, a cultural center, and/or other commercially-viable facilities. No decisions have currently been made to reuse the site at this point, although it may be expected that redevelopment discussions would renew now that construction of the remedy has been completed.

## **History of Contamination**

The landfill portion of the site was privately-owned by Himco and operated from 1960 to 1976. Wastes, such as household refuse, construction rubble, medical waste, and calcium sulfate were disposed of at the site. Materials were placed at ground surface across the site and in trenches excavated to approximately 10-15 feet deep in the eastern area of the site. Solid waste refuse was reportedly dumped in the trenches and burned. In 1976, the landfill was closed and covered with approximately 1 foot of sand overlying a 6-inch layer of calcium sulfate. The 4-acre area known as the CDA is located directly south of the landfill and north of CR 10 and it contained many small piles of rubble, concrete, asphalt, and metal debris. The CDA extended across the landfill boundary and onto property owned by adjacent landowners and is subdivided into seven residential and one commercial parcels.

In 1971, the Indiana State Board of Health (ISBH) first identified the Himco Dump site as an open dump. In early 1974, residents along CR 10 south of the site complained to ISBH about color, taste, and odor problems in the water from their shallow private wells. The source of contamination at the site was later shown to be the landfilled wastes. Analyses of samples from six shallow wells along CR 10 showed high levels of manganese. Even after replacing the shallow wells with deeper wells, going from 20-30 feet to 150-170 feet in depth, water in the deeper wells still showed elevated levels of sodium, which posed a chronic health threat.

## **Initial Responses**

The following is a chronology of initial responses to contaminant issues at the Himco Dump site after it was referred to EPA:

**April 1990** – EPA conducted community interviews of residents with private wells living south of the landfill and determined that many had complaints about the taste, odor, and the color of their drinking water. EPA's removal program consequently sampled 27 residential wells in the area. The water quality analyses of the samples indicated relatively high concentrations of iron, manganese, and sodium. After reviewing the results, the Agency for Toxic Substances and

Disease Registry recommended that an alternative source of potable water be provided to the residents due to the high levels of sodium (3,600 milligrams per liter (mg/L) or parts per million (ppm)), which would have significant implications for persons suffering from hypertension, diabetes, or heart ailments.

**September 1991** - Test pits were excavated during the RI to characterize site constituents. During one of the excavations, large quantities of leachate were observed flowing from fill material near the southern edge of the landfill. The leachate was analyzed and found to contain organic solvents including ethylbenzene (6,400 micrograms per liter (µg/L) or parts per billion (ppb)), 2-hexanone (29,000 ppb), toluene (480,000 ppb), and xylene (44,000 ppb). These contaminants represented an inhalation and contact hazard to persons in close proximity, having flash points ranging from 40-90 degrees Fahrenheit. The test pits where the hazardous substances were found were located within fifty yards from the private residences.

**November 1991**- Municipal water service was provided to the residents living south of the landfill. Himco, Miles Laboratories, and the City of Elkhart paid for the municipal water service extensions to the residences.

**May 19, 1992** - Himco signed an Administrative Order on Consent (AOC) with EPA to undertake and complete emergency removal activities to abate conditions at the site that presented an imminent and substantial endangerment to the public. The AOC required Himco to excavate in the vicinity of one of the test pits (identified as TL-5) to locate the source of buried volatile organic compounds (VOCs) in the leachate. The AOC also required Himco to perform limited extent of contamination surveys along the southeast central periphery of the site to assure that no additional VOCs were leaching offsite.

**May 22, 1992** – With EPA oversight, Himco performed an emergency removal action at the site consisting of locating and removing 71 55-gallon chemical drums containing an aqueous solution of 50 percent VOCs, including ethyl benzene and toluene.

## **RI/FS Results**

EPA conducted an RI/FS at the Himco Dump site from 1992 to 1993, taking soil, groundwater, leachate, surface water, and sediment samples. Chemical analyses of soil samples indicated the presence of arsenic across the western half of the site in concentrations up to an order of magnitude greater than background. VOCs such as benzene, toluene, xylene, trichloroethene, and 1,1-dichloroethane (DCA) were found to be distributed at low levels in soil across the site. Semi-volatile organic compounds (SVOCs), primarily polynuclear aromatic hydrocarbons, were most prominent in soil samples collected from the south-central area characterized by non-native soil and construction debris. EPA also found arsenic, benzene, and vinyl chloride in the on-site groundwater.

## **Basis for Taking Action**

Based on the results of the risk assessment in the RI, EPA determined that there were unacceptable risks to human health and the environment through future exposure by ingestion, inhalation, or direct contact with VOCs, SVOCs, and inorganic compounds in the soil and

groundwater at the site. EPA also determined that there was a significant potential for contamination of the aquifer because of the lack of any adequate natural or man-made barrier to impede leachate flow into the aquifer.

## **IV. Remedial Actions**

### **Remedy Selection**

In September 1993, EPA issued a ROD for the Himco Dump site. The major components of the selected remedy included:

- Constructing a Resource Conservation and Recovery Act (RCRA) Subtitle C composite landfill cap over the landfill area;
- Placing ICs on the landfill property to limit future land and groundwater use;
- Installing an active landfill gas collection system with treatment by vapor phase carbon;
- Installing an enclosed ground flare system if landfill gas characterization studies conducted during the RD indicate that VOC emissions exceed state Applicable or Relevant and Appropriate Requirements;
- Monitoring groundwater quality to ensure effectiveness of the remedial action and to evaluate the need for future groundwater treatment; and
- Taking mitigative measures during remedy construction to minimize adverse impacts to area wetlands.

### **Remedial Design and Pre-Design Groundwater Investigations**

In April 1995, EPA began the RD for the site and initiated a pre-design groundwater investigation (PDI). Information developed during the RD caused EPA to re-evaluate the selected remedy, given that:

- Groundwater monitoring data from the 1995 PDI, when compared to data from the RI sampling events in 1990 and 1991, indicated that the groundwater releases at the site were potentially in a state of equilibrium. Generally, the 1995 sampling results indicated that contaminant levels were comparable to or lower than the 1990-1991 results;
- When EPA began designing the composite cap and fence alignments as required in the 1993 ROD, it became clear that all of the residents adjacent to the landfill would lose the use of or access to parts of their properties when the cap and fence were installed over the CDA. This issue had not been addressed in the 1993 ROD;
- EPA revisited the baseline risk assessment (BLRA) and determined that new site data and refinement of the 1992 risk assessment assumptions warranted reconsideration of the BLRA because it did not address the CDA or groundwater use in the eastern residential area. Additional soil sampling and a risk evaluation confirmed the necessity of making the CDA subject to the 1993 ROD remedy in the same way as the landfill property;

- Based on data analysis of the March 2000 groundwater sampling round, EPA determined that there was a potential issue with groundwater contamination in the residential area east of the landfill that was not addressed in the 1993 ROD. EPA determined that additional groundwater sampling in and a risk evaluation for the eastern residential area by the landfill were needed to be protective;
- After obtaining new groundwater data from the residential area east of the landfill, both downgradient and side gradient in 2001, EPA determined it was not necessary to construct the RCRA Subtitle C cap over the landfill due to a lack of evidence that a contaminant plume existed outside of the site boundaries; and
- The CDA contains seven residential and one commercial property parcels. While the existing homes on the residential parcels were connected to the local municipal water supply, these homes also had operable private groundwater wells.

As a follow-up to the PDI above, a PRP, Bayer Healthcare, LLC. (Bayer), conducted a 2002 Site Supplemental Site Investigation (SSI) to evaluate the potential human health risks associated with soil and groundwater in the CDA and the groundwater in the eastern residential area. The results of the SSI showed a potential for adverse risks to certain receptors if exposed to the soil within the CDA or groundwater migrating from the site. Monitoring well water samples showed contaminants concentrations at or higher than concentrations found in the landfill monitoring wells and exceeding federal Safe Drinking Water Act maximum contaminant levels (MCLs), primarily for arsenic.

#### **2004 ROD Amendment**

Based on this new information described above, EPA issued a ROD Amendment on September 14, 2004 (see Attachment 1). The revised remedy was comprised of the following components:

- Contouring, grading, and vegetating the existing landfill cover and installing a gas management system. The landfill gas collection and treatment system shall include as necessary, a vapor phase carbon collection and treatment system and an enclosed ground flare system;
- Removing all construction debris and rubble from the surface of the CDA and excavating and disposing of contaminated materials in the soil to achieve the soil remedial action objectives (RAOs) established for the CDA;
- Providing municipal water to 39 residences located east of the landfill and abandoning their existing drinking water wells. In addition, abandoning drinking water wells in residential properties located within the CDA;
- Establishing a long-term groundwater monitoring program for a minimum of 10 years;
- Prior to implementing the long-term groundwater monitoring program, completing a pre-design groundwater investigation study on the south, east and southeast sides of the site

to determine concentrations and the rate and extent of migration of all detected contaminants;

- Placing ICs on the landfill, residential properties east and south of the landfill, a property designated as "Parcel F," and residential wells near the CDA; and
- Installing fencing around Parcel F, the CDA, and the landfill.

The amended remedy was designed to meet the following RAOs for the site:

**Landfill Cover and CDA:**

- Prevent exposure to carcinogenic compounds in the landfill and CDA presenting a total excess lifetime cancer risk (ELCR) above EPA's target risk range of  $1 \times 10^{-4}$  to  $1 \times 10^{-6}$  (1 in 10,000 to 1 in 1,000,000) for all site-related contaminants through all exposure pathways (i.e., ingestion, inhalation of soil-derived substances, and dermal contact);
- Prevent exposure to landfill and CDA soil containing noncarcinogens presenting a total noncarcinogenic hazard index (HI) greater than 1.0 for all site-related contaminants through all exposure pathways (i.e. ingestion, inhalation of soil-derived substances, and dermal contact);
- Prevent direct contact with the landfill and CDA contents that present potential physical hazards; and
- Maintain the integrity of the soil cover over the long-term.

**Groundwater:**

- Prevent the use of groundwater containing carcinogenic compounds in excess of MCLs or presenting a total ELCR above EPA's target risk range for all site-related contaminants through all groundwater pathways (inhalation of volatilized substances, ingestion, and dermal contact);
- Prevent the use of groundwater containing noncarcinogens in excess of MCLs and/or presenting a total noncarcinogenic HI greater than 1.0 for all site-related contaminants through all groundwater pathways (inhalation of volatilized substances, ingestion, and dermal contact);
- Prevent the use of groundwater containing site-related sodium, calcium, and iron concentrations in excess of their upper intake limits or recommended dietary allowances for sensitive populations; and
- Establish a groundwater-monitoring program that will ensure compliance with the above RAOs for groundwater.

**Air:**

- Prevent inhalation of indoor air containing carcinogens presenting a total ELCR above EPA's target risk range for all site-related contaminants released from the subsurface vapor migration pathway;

- Prevent inhalation of indoor air containing noncarcinogens presenting a total HI greater than 1.0 for all site-related contaminants released from the subsurface vapor migration pathway;
- Prevent the future migration of hydrogen sulfide gas and methane gas beyond the boundary of the landfill; and
- Establish a landfill boundary gas monitoring program that ensures compliance with all the above RAOs for air.

### Cleanup Goals for Groundwater

Groundwater cleanup levels for site contaminants of concern (COCs) are shown in Table 2:

**Table 2: Groundwater Cleanup Goals**

Contaminant of Concern (COC)	Cleanup Goal (µg/L)
Benzene	5
Vinyl Chloride	2
1,1-Dichloroethane	240
<i>cis</i> -1,2-Dichloroethane	70
Carbon Disulfide	10,000
<i>bis</i> -(2-ethylhexyl) phthalate	6
Aluminum	370,000
Arsenic	10
Barium	2,000
Beryllium	73
Calcium	250,000
Iron	26,000
Lead	15
Manganese	250,000
Mercury	2
Sodium	150,000
Sulfate	250,000
Chloride	250,000

### Enforcement

On November 28, 2007, the United States, the State of Indiana, and Bayer entered into a CD for the design and construction of the 2004 ROD Amendment remedy for the Himco Dump site (see Attachment 2).

### Remedy Implementation

Following EPA approval of remedial design in June 2010, Bayer began site preparation work, such as clearing and grubbing, in fall 2010. Bayer then mobilized to the site in March 2011 and started construction of the enhanced cover and gas management system. Removal of surface debris and contaminated soil from the CDA was completed by November 2011. After demobilizing for winter in December 2011, work on the landfill resumed in late April 2012 until

construction was completed in June 2012. EPA conducted a pre-final construction inspection on June 14, 2012, and sent a punch list of remaining site work to Bayer on June 21, 2012. On June 29, 2012, Bayer indicated to EPA that it had completed the remaining work activities at the site, in accordance with EPA's punch list. Subsequently, EPA issued a PCOR on July 19, 2012 (see Attachment 3).

Prior to initiation of work in the landfill, Bayer completed the water hookups of 39 residences located east of the site and abandoned the drinking water wells found in these homes. Bayer informed EPA that there were a few homes on the east side that declined free water hookups provided by Bayer - one resident had decided to connect himself, another house was vacant, and one more was being sold. The 2004 ROD Amendment also required 7 residences located south of the landfill to abandon in-home groundwater drinking water wells. EPA had provided city water to these homes south of the landfill in the 1990s. Bayer subsequently completed the abandonment of these in-home groundwater drinking water wells by mid-July 2012. EPA approved Bayer's *Construction Completion/Completion of Remedial Action (RA) Report* (October 1, 2012) on October 31, 2012 (see Attachment 4). O&M activities at the site, including semiannual groundwater monitoring, are ongoing.

### **Current Remedial Activity**

All RA construction activities have been completed. The project is currently in the long-term response phase (O&M). Bayer is implementing an EPA-approved O&M Plan, with associated activities described below.

### **Operation and Maintenance Activities**

As part of its O&M responsibilities, Bayer conducts semiannual sampling of the groundwater monitoring well network. The most recent groundwater sampling event occurred in 2015. In addition, Bayer regularly inspects the condition of the passive vent trenching (PVT) system it had installed and collects landfill gas data periodically to ensure methane levels are below action levels (5 percent by volume of the lower explosive limit (LEL)) as specified in the O&M Plan.

### **Methane Gas Mitigation**

Shortly after completing the remedy, Bayer took steps to address elevated methane gas levels found in September and October 2012 in soil gas probes (SGPs) 107, 110, and 114. The approved O&M Plan set the methane action level at 5 percent, by volume, of the LEL. In December 2012, Bayer implemented the EPA-approved Methane Investigation and Monitoring Plan (MIMP). The purpose of the MIMP was to further delineate the potential extent of the methane detected within the vicinity of existing SGPs 107, 110, and 114. The MIMP consisted of installing seven new SGPs in December 2012, with weekly monitoring for 4 weeks of the SGPs. Based on the results of the weekly methane monitoring, Bayer eventually implemented two separate methane remedial action plans (MRAPs) in 2013 and 2014 to address the elevated methane levels. The 2013 MRAP involved installing two PVT sections along the south and west boundaries of the site and was completed in November 2013. In response to EPA's August 2014 direction to Bayer to address elevated methane levels in the vicinity of several other SGPs (SGP-117S, SGP-100, and SGP-118), Bayer developed MRAP-2014, which consisted of extending the

PVT system further north along the western portion of the landfill. Work on MRAP-2014 was completed in December 2014.

Tables 1 and 2 of Bayer's April 24, 2015 response to EPA's information request present the summary of the methane monitoring data for the SGPs and PVT from 2012 to the present. In addition, Figures 4 through 7 present the locations of the PVT along the eastern, southeastern, southern, and western boundaries of the site, respectively (see Attachment 5).

### **Institutional Controls**

ICs are required for the site to ensure the protectiveness of the remedy. ICs are non-engineered instruments (such as administrative and/or legal controls) that help minimize the potential for exposure to contamination and protect the integrity of the remedy. Compliance with ICs is required to assure long-term protectiveness for any areas which do not allow for UU/UE. Table 3 (page 22) summarizes the implemented and planned ICs at the site. The 2004 ROD Amendment required ICs for four parcels comprising the site, 39 residential homes/properties east of the site, and 8 residential homes/properties south of the site. (Parcel F and the residential wells described in the ROD Amendment are the properties south of the site). Figure 2 (next page) depicts the area where the 2004 ROD requires ICs.

### **Off-site Properties (East and South of Site):**

The 2004 ROD required ICs on 47 mostly residential properties surrounding the site, with the ICs consisting of ERCs using State of Indiana model ERC language. Bayer obtained signed ERCs from 42 of the 47 properties (see Attachment 6), and since 2008 has made numerous attempts to obtain ERCs for the five remaining residential properties, with its most recent effort made in late 2014. Bayer has not been able to obtain ERCs on the remaining five properties because one property was destroyed by fire, another property's owner died and Bayer had difficulties determining the next of kin, and the rest refused outright to sign an ERC. While Bayer continues attempting to obtain the remaining ERCs, EPA and Bayer both believe it is unlikely that the remaining ERCs will be obtained in the near future, as explained in a 2012 correspondence from Bayer's legal counsel. (See Attachment 6).



Figure 2



**LEGEND**  
**Institutional Controls Required**  
Residential Parcels  
Himco Property Boundary

**Himco Dump**  
*Elkhart, Indiana*  
Date: 9/30/2015

### On-site Parcels:

The site is composed of four parcels owned by the following entities: 1) Bayer; 2) Indiana Michigan Power; 3) Alonzo Craft (or his estate or appointed trustee); and 4) CLD Corporation (CLD). All the parcel owners have signed ERCs, except for CLD. (See Table 3). With regards to CLD, Bayer and representatives of CLD have communicated during the past year regarding CLD signing an ERC for its parcel. EPA is being kept apprised of these discussions by Bayer as they occur.

**Table 3: Summary of Planned and/or Implemented ICs**

Media, engineered controls, and areas that do not support UU/UE based on current conditions	ICs Needed	ICs Called for in the Decision Documents	Impacted Parcel(s)	IC Objective	Title of IC Instrument Implemented and Date
Groundwater & Soil (Landfill)	Yes	Yes	-Alonzo Craft (Parcel # 20-01-36-251-015.000-005)  -Bayer Healthcare (Parcel # 20-01-36-226-001.000-006)  -Indiana Michigan Power (Parcel # 20-01-36-276-004.000-006)  -CLD Corporation ) (planned)	Prohibit: 1.Any activity that may interfere with any component of the remedy; 2.Using site for residential use 3.Installation of drinking water wells 4.Digging or drilling or excavation of soil	ERCs recorded at the Elkhart County Recorder's Office Number (and Date):  Alonzo Craft: 2009-00860 (2/12/08)  Bayer Healthcare: 2013-18554 (8/30/12)  Indiana Michigan Power: 2008-07204 (3/12/08)  CLD Corporation (planned)
Groundwater (Eastside Residents)	Yes	Yes	39 homes east of landfill with following parcel numbers: 02-31-151-005-026, 02-31-101-008-026, 02-31-177-002-026, 02-31-151-003-026, 02-31-102-002-026, 02-31-101-011-026, 02-31-152-002-026, 02-31-101-007-026, 02-31-152-017-026,	Prohibit: 1. Any activity that may interfere with response activities, long-term monitoring, or measures necessary to ensure effectiveness and integrity of the response action 2. Installation of drinking water wells	ERCs (37 of 39 homes) recorded in 2007-2009 at the Elkhart County Recorder's Office: 1. 2006 38041 2. 98-034787 3. 2000-13917 4. 2009-20267 5. 91-007139 6. 2001-12507 7. 2003-18732 8. 2009-28470



			02-31-152-017-018, 02-31-151-002-026, 02-31-152-019-026, 02-31-101-001-026, 02-31-102-001-026, 02-31-101-002-026, 02-31-101-003-026, 02-31-102-003-026, 02-31-101-004-026, 02-31-102-004-026, 02-31-101-005-026, 02-31-102-005-026, 02-31-101-006-026, 02-31-102-006-026, 02-31-102-007-026, 02-31-102-008-026, 02-31-101-009-026, 02-31-101-010-026, 02-31-101-012-026, 02-31-101-013-026, 02-31-101-014-026, 02-31-177-001-026, 02-31-177-003-026, 02-31-151-001-026, 02-31-151-004-026, 02-31-151-008-026, 02-31-151-007-026, 02-31-151-006-026, 02-31-152-001-026, 02-31-152-003-026, 02-31-152-004-026, 02-31-152-002-026	Allow participating settling defendants (Bayer) to permanently abandon operation of any private drinking water well in accordance with State regulations (Indiana Administrative Code 13-10-2)	9. 0099-35497 (2) 10. 2006-17794 11. 2009-28468 12. 2008-05118 13. 2000-32623 14. 2008-05097 15. 2009-28466 16. 2004-09424 17. 2008-21334 18. 2004-07047 19. 0099-15366 20. 2007-31616 21. 2002-37516 22. 2001-14705 23. 2004-36079 24. 2009-28480 25. 2008-05128 26. 2006-00640 27. 2009-28464 28. 2009-02135 29. 2004-39656 30. 96-0414025 31. 92-019332 32. 93-000819 33. 2009-28466 34. 2009-28462 35. 95-010858 36. 93-024768  Note- ERC No. 00990-35497 covers 2 parcels (Glick property)
Groundwater (Southside Residents)	Yes	Yes	8 parcels (7 residential & 1 commercial) with the following parcel nos.: 01-36-251-019-005, 01-36-251-008-005, 01-36-251-003-005, 01-36-251-007-005, 01-36-251-006-005, 01-36-251-005-005, 01-36-251-004-005, & 01-36-251-017- 005	Prohibit: 3. Any activity that may interfere with response activities, long- term monitoring, or measures necessary to ensure effectiveness & integrity of the response action 4. Installation of drinking water wells  Allow participating settling defendants (i.e., Bayer) to permanently abandon operation of any private drinking water well in accordance with State regulations (Indiana Administrative Code 13- 10-2)	ERCs (5 out of 8 parcels) recorded in 2007-2008 at the Elkhart County Recorder's Office:  1. 92-019332 2. 89-005060 3. 96-001116 4. 89-010235 5. 2006-00640  See Attachment 5

## Current Compliance

Based on information gathered by EPA as part of this FYR, including the results of the FYR site inspection, and discussions with Bayer, EPA is not aware of site or media uses that are inconsistent with the stated objectives to be achieved by the ICs. The ERCs in place are consistent State ERC model language, are enforceable, and appear to be functioning as intended. No site uses which are inconsistent with the implemented ICs or remedy IC objectives were noted during the FYR site inspection.

## IC Evaluation and Follow up Actions Needed

Bayer, with EPA's assistance, will continue to pursue obtaining ERCs from one on-site parcel owner and, to the extent possible, the five residential properties to the east and south of the site.

LTS procedures (e.g., a LTS plan or O&M plan) will be developed and implemented to ensure continued effectiveness of ICs in place. Such procedures will include mechanisms and procedures for inspecting and monitoring compliance with the ICs as well as communications procedures. An annual report will be submitted to EPA to demonstrate: that the site was inspected to ensure no inconsistent uses have occurred; that ICs remain in place and are effective; and that any necessary contingency actions have been executed. Results of IC reviews will be provided to EPA in an annual ICs report and with a certification that the ICs remain in-place and are effective.

## **System Operations and O&M Costs**

Table 4 presents Bayer's estimated annual O&M costs at the Himco site.

**Table 4: Annual System Operations/O&M Costs**

<b>Dates</b>		<b>Total Cost rounded to nearest \$1,000</b>
<b>From</b>	<b>To</b>	
2012	Present	\$500,000
Annual		Approx. \$100,000

## **V. Progress Since the Last Review**

This is the first FYR for the Himco Dump site.

## **VI. Five-Year Review Process**

### **Administrative Components**

EPA notified IDEM that it was initiating the FYR on March 4, 2015 (see Attachment 7). The review was led by Ross del Rosario, EPA's remedial project manager (RPM) for the site and was

assisted by Doug Petroff of IDEM, representing the support agency, and Christopher Fassero of the United States Army Corps of Engineers (Corps), EPA's technical consultant. The FYR consisted of the following components:

- Community notification and involvement;
- Document review;
- Data review;
- FYR site inspection; and
- FYR Report development and review.

### **Community Notification & Involvement**

EPA initiated activities to involve the community in the FYR process when it updated its Himco Dump site webpage in March 2015. The updated webpage informed interested parties that EPA would be conducting a review of the effectiveness of the remedy to ensure that the surrounding community continues to be protected. After updating the webpage, on March 15, 2015, EPA published a notice on in a local newspaper, *The Elkhart Truth*, informing readers that EPA would begin a FYR at the site and was providing an opportunity for interested parties to contact EPA if they had any concerns regarding the site. EPA also reviewed and updated the existing community involvement plan and site mailing list.

### **Document Review**

EPA reviewed the following documents for this FYR:

- September 1993 ROD and September 2004 ROD Amendment
- July 2012 PCOR
- 1992 RI/FS Reports
- 2012 Construction Completion/RA Report
- 2011 – 2014 Annual Groundwater Monitoring Reports
- ERCs collected by Bayer
- Site correspondence
- The Corps' evaluation of Bayer's groundwater trend analysis

### **Data Review**

#### ***Groundwater***

Bayer performed a groundwater trend analysis for the 18 site COCs, which EPA reviewed for this FYR. Using data from 2010 to 2014, Bayer analyzed a total of 486 data sets from 27 monitoring wells. There were generally 8-10 samples for each well/analyte pair. Some of the key findings included the following:

- The concentration of each COC evaluated during the 4-year period was generally found to be below its respective cleanup goal (98 percent of data points). As a corollary, more than half (54 percent) of the data points were below method detection limits;

- For those data sets above detection limits (46 percent), approximately 10 percent exhibited decreasing trends, while 3 percent showed increasing trends. The remaining 33 percent exhibited no statistically significant trends;
- For the 3 percent showing increasing trends, the concentrations of the COCs were well below their respective cleanup goal, except for manganese. These COCs included barium, 1,1-dichloroethane, *cis*-1,2-dichloroethane, carbon disulfide, chloride, iron, manganese, and sodium; and
- Six COCs were found to be below their respective detection limits and/or had no statistically significant trend in all 27 monitoring wells. These COCs included vinyl chloride, *bis*-(2-ethylhexyl) phthalate, beryllium, lead, mercury, and aluminum.

To better illustrate the COCs with decreasing trends (comprising 10 percent of the data sets), Table 5 below compares the September 2014 concentration of those COCs with the associated groundwater cleanup goals (highlighted concentrations exceed the RAO):

**Table 5: Groundwater Trend Analysis - Decreasing**

<i>Analyte</i>	<i>Aquifer</i>	<i>Well</i>	<i>September 2014 Concentration (µg/L)</i>	<i>GW RAO (µg/L)</i>	<i>Percentage of GW RAO</i>
Benzene	Upper	WT101A	0.59 J	5	12%
Sulfate	Upper	WT101A	72000	250000	29%
Iron	Lower	WT101C	370	26000	1%
Manganese	Lower	WT101C	15 U	1140	1%
Sodium	Lower	WT101C	18000	150000	12%
Chloride	Lower	WT101C	2200	250000	1%
Manganese	Intermediate	WT101D	43	1140	4%
Barium	Intermediate	WT101E	45 J	2000	2%
Sulfate	Upper	WT102A	38000	250000	15%
Barium	Upper	WT106A	32 J	2000	2%
Sodium	Upper	WT106A	22000	150000	15%
Barium	Intermediate	WT106B	98 J	2000	5%
Manganese	Intermediate	WT106B	48	1140	4%
Sodium	Intermediate	WT106B	27000	150000	18%
Sulfate	Intermediate	WT106B	76000	250000	30%
Iron	Upper	WT111A	1300	26000	5%
Manganese	Upper	WT111A	360	1140	32%
Sodium	Upper	WT111A	13000	150000	9%
Chloride	Upper	WT111A	12000	250000	5%
Sulfate	Upper	WT111A	120000	250000	48%
Sulfate	Upper	WT114A	33000	250000	13%

<i>Analyte</i>	<i>Aquifer</i>	<i>Well</i>	<i>September 2014 Concentration (µg/L)</i>	<i>GW RAO (µg/L)</i>	<i>Percentage of GW RAO</i>
1,1-Dichloroethane	Intermediate	WT114B	1.1	240	0.5%
1,1-Dichloroethane	Intermediate	WT114C	1.5	240	1%
Barium	Intermediate	WT114C	58 J	2000	3%
Manganese	Intermediate	WT114C	28	1140	2%
Sulfate	Intermediate	WT114C	76000	250000	30%
Carbon disulfide	Upper	WT115B	1.4 U	10000	0%
Arsenic	Upper	WT115B	1.0 U	10	10%
Manganese	Upper	WT115B	15 U	1140	1%
Barium	Upper	WT115C	40 J / 39 J	2000	2%
Calcium	Upper	WT115C	100000	250000	40%
Manganese	Upper	WT115C	57 / 56	1140	5%
Sulfate	Upper	WT116A	280000	250000	112%
Manganese	Upper	WT119B	110	1140	10%
Arsenic	Intermediate	WT120B	5.8	10	58%
Calcium	Intermediate	WT120B	73000	250000	29%
Manganese	Intermediate	WT120B	220	1140	19%
Sulfate	Intermediate	WT120B	40000	250000	16%
1,1-Dichloroethane	Upper	WT121A	1.5 / 1.6	240	1%
Calcium	Upper	WT121A	83000 / 85000	250000	33%
Manganese	Upper	WT121A	51 / 52	1140	4%
Chloride	Upper	WT121A	58000 / 58000	250000	23%
Benzene	Upper	WT122A	0.25 J	5	5%
Manganese	Intermediate	WT121B	31	1140	3%
Sulfate	Intermediate	WT122B	100000	250000	40%
Iron	Lower	WTE3	110	26000	0.4%

Table 6 illustrates COCs with increasing trends (comprising 3 percent of the data sets), for the same September 2014 data, which is compared with their associated groundwater cleanup goals:

**Table 6: Groundwater Trend Analysis – Increasing**

<i>Analyte</i>	<i>Aquifer</i>	<i>Well</i>	<i>September 2014 Concentration (µg/L)</i>	<i>GW RAO (µg/L)</i>	<i>Percentage of GW RAO</i>
1,1- Dichloroethane	Upper	WT106A	3.5	240	1.5%
Barium	Intermediate	WT121B	450	2000	22.5%
Carbon disulfide	Intermediate	WT120B	1.0	10000	0.01%
Chloride	Intermediate	WT115C	45	250	18%
Chloride	Upper	WT101E	34	250	13.6%



<i>Analyte</i>	<i>Aquifer</i>	<i>Well</i>	<i>September 2014 Concentration (µg/L)</i>	<i>GW RAO (µg/L)</i>	<i>Percentage of GW RAO</i>
<i>cis</i> -1,2-Dichloroethene	Upper	WT115C	0.52	70	0.7%
<i>cis</i> -1,2-Dichloroethene	Upper	WT116A	2.6	70	3.7%
Manganese	Upper	WT115A	530	1,070	50%
Manganese	Upper	WT116A	1,600	1,070	150%
Manganese	Upper	WT122A	820	1,070	77%
Manganese	Lower	WTE3	47	1,140	4%
Sodium	Intermediate	WT101D	21,000	150,000	14%
Sodium	Intermediate	WT102B	31,000	150,000	21%
Vinyl chloride	Upper	WT122A	1.5	2	75%
Vinyl chloride	Intermediate	WT106B	1.1	2	55%
Vinyl chloride	Intermediate	WT122B	0.89	2	44.5%

To further illustrate the results of the groundwater trend analysis, Figures 3-5 (next pages) depict a spatial summary of statistically significant groundwater trends in the upper, intermediate, and lower aquifers at various monitoring wells, both off-site and on-site.

In summary, the groundwater trend analysis demonstrated that groundwater quality at the site was mainly in compliance with remediation objectives and, where trends in concentration over time are noted, these have low rates of change. Very few well/analyte pairs (10 of 486) were observed above groundwater cleanup goals during the last sampling event in May 2015, and there is a large weight of evidence that COC concentrations across the monitoring network have been primarily stable and predictable over the past 5 years (December 2010 - May 2015). Continued groundwater monitoring is warranted and the possibility of reduced monitoring frequency (changing from semi-annual to annual monitoring) could be considered as additional data is evaluated over the next few years.

### ***Landfill Gas***

As part of the approved O&M Plan, landfill gas data is collected by Bayer on a periodic basis and submitted to EPA for review. Based on EPA's review of the data, methane levels were found to be elevated and required a response action to mitigate such elevated levels. Section IV above described the actions taken to mitigate the elevated levels of methane and Attachment 5 contains landfill gas data reviewed by EPA, along with figures depicting improvements to the PVT system for controlling the landfill gas emissions at the site.

### **Site Inspection**

EPA held the FYR site inspection at the site on June 30, 2015. Mr. del Rosario from EPA and representatives from IDEM, Bayer, and the Corps were present during the inspection (see



Attachment 8). Mr. del Rosario led the inspection, with the Corps and IDEM providing support. The following activities were performed during the inspection:

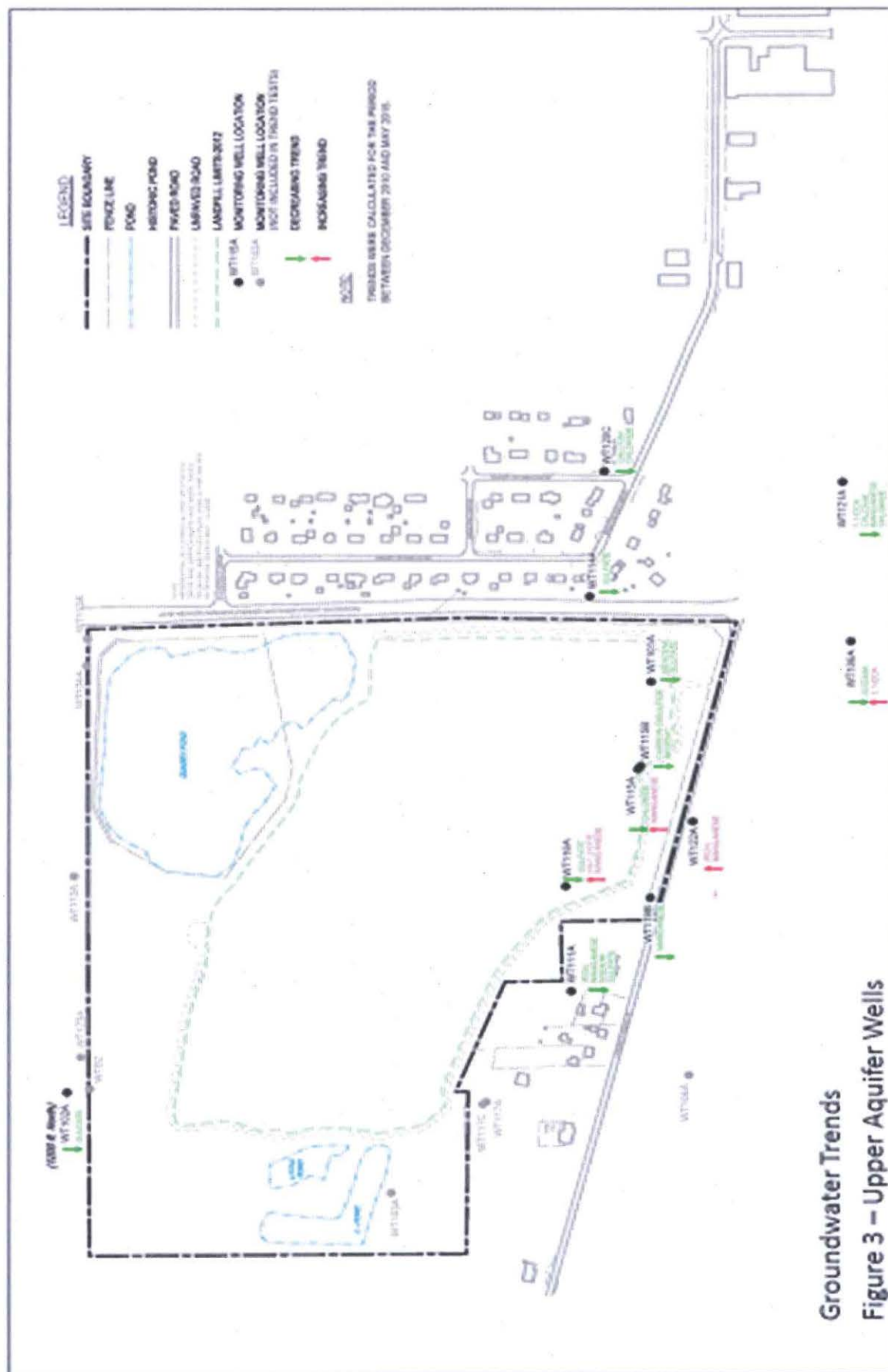
- A walking tour of the entire site to visually inspect the various site features, including, the PVT system, the onsite pond for runoff diversion, the drainage system, and the landfill cover;
- A discussion on 1) current methane levels now that the PVT was expanded; 2) Bayer's efforts to obtain an ERC signed by CLD; the owner of the remaining parcel within the site boundary; 3) the Corps' concerns over erosion problems near a drainage outfall (it recommended using a more appropriately-sized riprap in the outfall); and 4) information necessary to complete the FYR; and
- Mr. del Rosario visited some of the east-side homes where an alternate water supply was provided to 39 residents.

No unusual problems or situations were observed during the inspection. The fencing, soil cover, and passive gas management system appeared to be in good condition. Based on the condition of the site and information provided by Bayer during the inspection, the regulatory agencies did not find any major concerns or issues requiring immediate attention. Minor concerns such as overgrown vegetation, standing water due to low spots on the landfill, and the possible need to replace some riprap, were noted during the site visit, which Bayer will address.

Bayer prepared meeting notes for the FYR site inspection and sent them to EPA. (See Attachment 9). Attachment 10 contains site photos taken during the FYR site inspection.

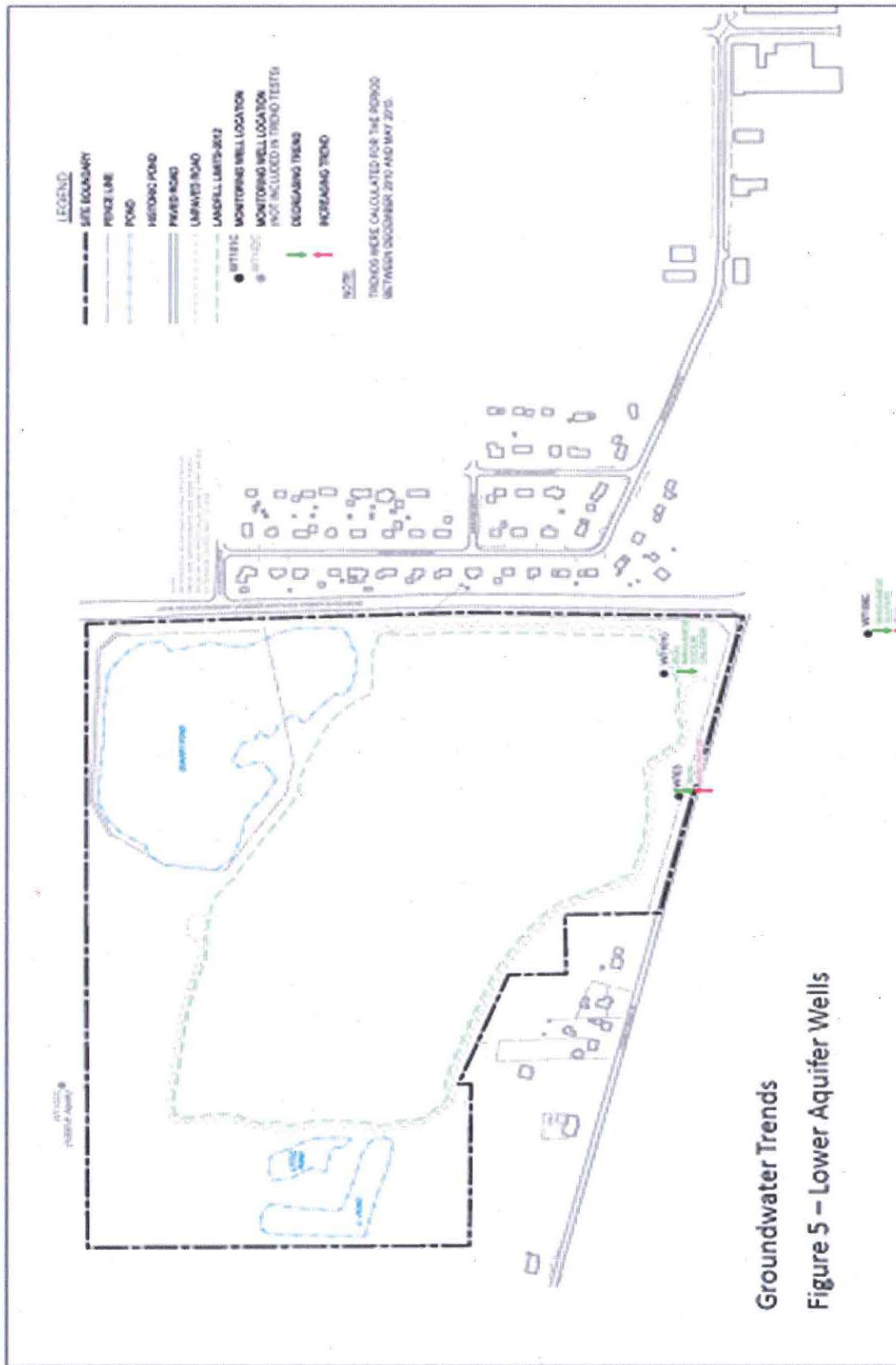
### **Interviews**

Although EPA notified the community of the FYR, EPA received no responses from the public and therefore conducted no formal interviews during the FYR. EPA, IDEM, and the Corps held an impromptu question and answer session with Bayer during the site tour. Mr. del Rosario and the Corps asked Bayer questions related to the PVT, methane levels at the landfill, ICs, condition of the soil cover, future groundwater monitoring, and other related matters.



Groundwater Trends  
Figure 3 – Upper Aquifer Wells





## **VII. Technical Assessment**

### **Question A: Is the remedy functioning as intended by the decision documents?**

**Yes.** The remedy continues to function as intended by the 2004 ROD Amendment.

Presently, groundwater data reviewed by EPA did not show the presence of a contaminant plume outside of the site boundaries. In addition, EPA found that there were only a few sporadic exceedances of cleanup standards for COCs, the recently-expanded passive gas venting system has resolved elevated methane levels found in certain parts of the landfill, and most of the nearby residences have been connected to the city water supply.

The enhanced soil cover and PVT are working as designed. All residents on the east side of the landfill have been provided with city water, eliminating an exposure pathway for site-related contaminants. Also, all drinking water wells located on the east and south residences were abandoned to the extent possible. A review of groundwater data indicates groundwater quality is stable and continues to improve. There is no evidence that a contaminant plume exists downgradient from the site. While there have been elevated methane levels found within the landfill recently, this issue was addressed by expanding the existing PVT system in 2013 and 2014. Long-term groundwater monitoring requirements from the ROD Amendment are being implemented through the approved O&M Plan. ICs in the form of ERCs are in place and are effective. While there is a need to obtain a signed ERC for one owner onsite and five off-site residential properties, access controls (e.g., fencing and warning signs) provide adequate deterrence at this point.

### **Question B: Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives used at the time of remedy selection still valid?**

**Yes.** No changes to exposure assumptions, toxicity data, cleanup levels, and RAOs are required. The remedy continues to progress towards meeting all the RAOs. A long-term groundwater monitoring program is tracking progress in meeting groundwater cleanup goals. Review of existing groundwater data from 2010 to 2014 suggests that groundwater quality is improving.

### **Question C: Has any other information come to light that could call into question the protectiveness of the remedy?**

**No.** There has been no other information that came to light calling into question the protectiveness of the remedy. This was verified through responses on information requests sent by EPA to Bayer in preparation of this FYR and responses to questions posed by EPA during the FYR site inspection conducted in June 2015.

## **VIII. Issues**

Table 7 (on the next page) lists the issues that could affect the long-term protectiveness of the site remedy.

**Table 7: Issues**

Issues	Affects Current Protectiveness? (Y/N)	Affects Future Protectiveness? (Y/N)
Six ERCs (five offsite and one onsite) remain to be signed and recorded.	No	Yes
LTS procedures are needed to ensure that effective ICs are monitored, maintained and enforced.	No	Yes

## IX. Recommendations and Follow-up Actions

Table 8 identifies the recommendations and follow-up actions needed to address the long-term protectiveness issues identified in Table 7.

**Table 8: Recommendations and Follow-up Actions**

Issue	Recommendations and Follow-up Actions	Party Responsible	Oversight Agency	Milestone Date	Affects Current Protectiveness (Y/N)	Affects Future Protectiveness (Y/N)
Six ERCs (five offsite and one onsite) remain to be signed and recorded.	Obtain signatures on and record remaining ERCs.	PRP	EPA/State	3/21/2017	N	Y
LTS procedures are needed to ensure that effective ICs are monitored, maintained and enforced.	Develop and implement a LTS plan within the existing site O&M Plan to include procedures for monitoring and tracking compliance with existing ICs, communicating with EPA, and providing an annual certification to EPA that the ICs remain in place and are effective.	PRP	EPA/State	3/21/2017	N	Y



## **X. Protectiveness Statement(s)**

The remedy at the Himco Dump site currently protects human health and the environment because it is functioning as intended in accordance with the decision documents. Municipal water has been provided to impacted residences, the soil cover on and the passive gas venting system in the landfill are operating and functioning as designed, and the PRP is implementing the long-term groundwater monitoring program. ICs in the form of ERCs have been recorded on the landfill property and on impacted residential properties to the east and south of the landfill. However, in order for the remedy to be protective in the long term, six additional ERCs should be signed and recorded. Also, the PRP should implement a LTS plan within the existing O&M Plan to include procedures for monitoring and tracking compliance with ICs, communicating with EPA, and providing an annual certification to EPA that ICs remain in place and are effective.

## **XI. Next Review**

EPA will conduct the next FYR at the Himco Dump site no later than five years from the date of this report.

# Attachment 1

2004 ROD Amendment



The 2004 ROD Amendment is incorporated by reference (see SDMS Document Number 216842).

## Attachment 2

2007 RD/RA Consent Decree

The 2007 RD/RA Consent Decree is incorporated by reference (see Civil Action Number 2:07-cv-304-TS, *United States of America and State of Indiana v. Bayer Healthcare LLC, et. al.*, U.S. District Court for the Northern District of Indiana South Bend Division or SDMS Document Number 286121).

# Attachment 3

2012 PCOR

**SUPERFUND PRELIMINARY SITE CLOSEOUT REPORT**  
**FINAL REMEDIAL ACTION**  
**For the**  
**Himco Dump Superfund Site**  
**Elkhart, Indiana**

**I. INTRODUCTION**

This Preliminary Closeout Report (PCOR) documents that all physical construction activities have been completed at the Himco Dump (Himco) Superfund site, Elkhart, Indiana, in accordance with the U.S. Environmental Protection Agency's (EPA) *Close Out Procedures for National Priorities List Sites* (OSWER Directive 9320.2-09A-P (January 2000)). Himco is a potentially responsible party (PRP)-lead site and the remedial action (RA) was conducted pursuant to a consent decree (CD) with EPA that was entered on November 28, 2007 (Civil Action No. 2:07-cv-304-TS). EPA is the enforcement lead for the Himco site and has been overseeing the cleanup activities performed by Bayer Healthcare, LLC (Bayer), the participating PRP.

EPA, assisted by the Indiana Department of Environmental Management (IDEM), conducted a pre-final inspection with Bayer at the site on June 14, 2012, to ensure that the cleanup was constructed in accordance with the approved remedial design (RD) plans and specifications required under the CD. The RA included making enhancements to the existing soil cover, installing a landfill gas management system, connecting selected residences to city water, abandoning drinking water wells on homes connected to city water, and cleaning up contamination in the construction debris area (CDA) of the site. EPA verified during the inspection that Bayer conducted the RA in accordance with approved RD plans and specifications and on June 21, 2012, the Agency sent Bayer a punch list of items that needed to be addressed by Bayer before certifying completion. Bayer sent EPA a construction report on June 29, 2012, and certified in the report that all items on the punch list were completed (see Attachment).

Institutional controls (ICs) in the form of restrictive covenants are in place to ensure all existing private drinking water wells were abandoned and to prohibit the use of groundwater by each home that was provided city water on the east side of the landfill. An IC in the form of a restrictive covenant, to restrict future use of the landfill, was being worked on at the time of the pre-final inspection by the PRP. Lastly, abandonment of remaining private drinking water wells south of the former landfill was completed in mid-July. Therefore, the Himco site has achieved construction completion status.

**II. SUMMARY OF SITE CONDITIONS**

**Site Description**

The Himco site is a closed, unlicensed landfill located at the intersection of County Road 10 (CR 10) and John Weaver Parkway, Cleveland Township, in Elkhart County, Indiana.

The site is approximately 60 acres and was in operation between 1960 and 1976. The area was initially a mixture of marsh and grassland. Wastes, including household refuse, construction rubble, medical waste, and calcium sulfate, were placed in the landfill when it was in operation. In 1976, the landfill was closed and covered with about one foot of sand overlying a calcium sulfate layer. A mix of agricultural, residential, and commercial/light industrial areas surrounds the site. A perimeter fence and locked gate prevent unauthorized parties from entering. A four-acre area called the construction debris area (CDA), bordered the former landfill to the south. The CDA encompassed parts of the backyards of 7-8 homes located on the southern end of the landfill.

### **Site History and Enforcement Activities**

Detailed below is a chronology of the site history and enforcement activities:

**1974** - The Indiana State Board of Health analyzed samples from shallow residential wells located immediately south of the site after receiving complaints about the color, taste, and odor of groundwater from the shallow wells. The analyses indicated the presence of high levels of manganese in the water samples.

**1981** - The U.S. Geological Survey (USGS), in cooperation with the Indiana Department of Natural Resources and the Elkhart Water Works, completed a three-year study that determined the extent of a leachate plume potentially emanating from the site by using bromide ion concentrations in the groundwater as an indicator.

**1984** - EPA's field investigation team sampled monitoring wells previously installed by the USGS. Laboratory analyses showed that metals, semivolatile organic compounds (SVOCs), and volatile organic compounds (VOCs) impacted the groundwater downgradient of the Himco site. The metals detected included aluminum, arsenic, barium, chromium, cobalt, selenium, beryllium, cadmium, copper, zinc, manganese, lead, nickel, and mercury. Organic compounds detected included acetone, benzene, phenol, Freon, 4-methylphenol, trans-1,2-dichloroethene, 2-butanone, chloroethane, and pyrene.

**June 24, 1988** - The Himco site was proposed for the National Priorities List (NPL).

**1989** - EPA initiated a Fund-lead Remedial Investigation/Feasibility Study (RI/FS).

**February 21, 1990** - The Himco site was placed on the NPL.

**April 1990** - Due to reports from community interviews indicating that residents with private wells living south of the landfill were complaining about the taste, odor, and the color of their water, EPA's removal program sampled 27 residential wells in late April 1990. The water quality analyses indicated relatively high concentrations of iron, manganese, and sodium. After review of the results, the Agency for Toxic Substances and Disease Registry (ATSDR) recommended an alternative source of potable water be provided to the residents due to the high levels of sodium (at 3,600 parts per million (ppm)), which had profound implications for persons who suffered from hypertension, diabetes, and heart ailments.



**September 1991** - Test pits were excavated to characterize site constituents during the remedial investigation. During one of the excavations, large quantities of leachate were observed flowing from fill materials. The leachate was observed near the southern edge of the landfill. The leachate was analyzed and found to contain organic solvents including ethylbenzene (6,400 ppm), 2-hexanone (29,000 ppm), toluene (480,000 ppm), and xylene (44,000 ppm). These contaminants all have an inhalation and contact hazard to persons near the hazards, and have flash points ranging from 40-90 degrees Fahrenheit. The test pits where the hazardous substances were found were located within fifty yards from the private residences.

**November 1991**- Municipal water service was provided to the residents living south of the landfill. Himco Waste Away Services, Inc., Miles Laboratories, and the city of Elkhart paid for the municipal water service extensions to the residences.

**May 19, 1992** - Mr. Charles Himes, Jr., President of Himco Waste-Away Services Inc., signed an Administrative Order on Consent (AOC) to undertake and complete emergency removal activities to abate conditions that presented an imminent and substantial endangerment to the public. The AOC required Himco to excavate in the vicinity of one of the test pits identified (TL-5) to locate the buried VOCs and their source. The AOC also required limited extent of contamination surveys along the southeast central periphery of the site to assure that no additional VOCs were encountered.

**May 22, 1992** - Himco performed an emergency removal action, locating and removing seventy-one (71), 55-gallon drums containing 50 percent (%) VOCs, such as ethyl benzene and toluene. EPA conducted oversight of this removal action.

**1992** - The Remedial Investigation/Feasibility Study (RI/FS) Report was completed.

**September 30, 1993** - EPA issued a Record of Decision (ROD) for the site.

**April 1995** - EPA conducted a pre-design groundwater investigation. Information collected during this investigation supported a change in the remedy.

**1996, 1998 and 2000 Supplemental Site Investigations** - Additional site investigations were carried out by EPA from 1996 to 2000. The 1996 groundwater investigation was conducted to confirm the groundwater analytical detections of the 1995 pre-design investigation, primarily benzene found in monitoring well WT116A. The objectives of the 1998 supplemental site investigation were to gather analytical data to support the completion of a supplemental human health risk assessment and to characterize soil gas constituents. Soil, soil gas, and groundwater samples were obtained during the 1998 survey. The primary objectives of the 2000 supplemental site investigation were to quantify the lateral migration of landfill associated gases to the east of the landfill, to confirm the presence or absence of constituents that may contribute to the Himco site area groundwater risk, to determine the degree in which groundwater at the site is currently being affected in both a horizontal and vertical sense by the landfill, and to define any temporal/spatial patterns or trends in the groundwater geochemistry related to

the landfill. Groundwater samples were collected from underneath the landfill and in selected residential wells during the 2000 survey.

**2002 Supplemental Site Investigation/Site Characterization Report (SSI/SCR)** – This report summarized the health risk associated with soil and the groundwater for the CDA and the groundwater for the residential area east of the landfill. The results of the risk assessment indicated a potential for unacceptable risks to adults, children, and construction workers posed by contaminated soil from the CDA and groundwater migrating eastward from the landfill.

**September 14, 2004** – Based on new information gathered since issuance of the ROD, EPA issued a ROD Amendment. The remedy called for 1) enhancing the existing cover, ensuring at least 18 inches of soil cover throughout the landfill, along with a gas management system 2) removing debris and contaminated material from the CDA 3) providing alternative drinking water to 39 homes south and southeast of the site, along with abandoning the drinking water wells from these homes 4) implementing a long-term groundwater monitoring program and 5) placing ICs on the landfill and other areas to limit future use, prohibit the installation of groundwater wells on site, and requiring the abandonment of private drinking water wells at homes provided with city water.

**November 28, 2007** – The RD/RA Consent Decree was entered in court. The state is named as co-plaintiff in the decree.

**June 2010** – Final RD plans for the landfill/gas management system were approved by EPA. Concurrent with approval of these plans, Bayer completed the hookups of 39 homes located east of the landfill to the city's water supply, in accordance with the CD and ROD Amendment. The water hookups were completed prior to the end of 2010.

**July 21, 2010** – EPA issued a notice to proceed with RA. Bayer initiated clearing and grubbing operations in November 2010. Prior to start of this work, EPA and IDEM worked with Bayer to ensure that no threatened or endangered species were affected by the operation (there were no threatened or endangered species at the site). The issue of migratory birds potentially nesting on trees inside the landfill was resolved through consultation with the state's natural resources agency.

**March 2011** – Bayer mobilized to the site to conduct the RA.

**June 14, 2012** – EPA conducted a pre-final construction inspection of the site. A punch list of remaining activities to be completed was prepared by the Agency on June 21, 2012.

**June 29, 2012** – Bayer submitted a pre-final construction report that indicated the punch list of items referenced in EPA's June 14<sup>th</sup> letter had been completed.

**July 2012** – Bayer abandoned the remaining two private drinking water wells at the southern end of the landfill.

## Site Characteristics

The Himco site is bordered to the north by a quarry pond, which was formerly a sand and gravel pit, and agricultural land. John Weaver Parkway lies immediately to the east and residential properties beyond. County Route (CR) 10 forms the southern boundary, with additional residential homes further south. Undeveloped land and agricultural properties lie to the west.

Elkhart County is located in the St. Joseph River Basin, a thick sequence of glacial outwash deposits ranging from 85 to 500 feet that overlies the bedrock. In the vicinity of the site, these overburden deposits consist primarily of outwash sands and gravels that contain both minor lenses of silt and clay, along with a regionally significant clay/silt dominated interval of variable thickness. The geology of the site consists, in descending order, of: 1) upper sand and gravel; 2) intermediate sand and gravel with silt/clay layers; 3) lower sand and gravel; and 4) bedrock. Regional groundwater flows in a south/southeast direction underneath the site.

According to the RI performed in 1991-1992, soil samples indicated the presence of arsenic across the western half of the site in concentrations up to an order of magnitude greater than background. Volatile organic compounds (VOCs) such as benzene, toluene, xylene, trichloroethene, and 1,1-dichloroethane were distributed at low levels in soil across the site. Semivolatile organic compounds (SVOCs), primarily polynuclear aromatic hydrocarbons (PAHs), were most prominent in samples collected from the south-central area characterized by non-native soil and construction debris. According to the 2002 Supplemental Site Investigation/Site Characteristics Report (SSI/SCR), two isolated detections of BTEX compounds were found, one on the south side of CR 10, and one on the east side of John Weaver Parkway. In addition, there were three isolated detections of chlorinated ethenes/ethanes also found on the east side of John Weaver Parkway. Soil data from the CDA indicated the presence of PAHs, SVOCs, and metals such as arsenic, lead, and mercury.

The 2002 SSI/SCR report concluded that the fate and migration of contaminants found in the landfill and CDA were dependent on the geologic conditions and the chemical properties of the contaminants. In all cases, the highest detected concentrations of contaminants in soil gas samples were located in the southeast corner of the site, just northwest of the intersection of CR 10 and John Weaver Parkway.

## Selected Remedy

The selected remedy for the site, as described in the 2004 ROD Amendment, is as follows:

- Contour, grade, and vegetate the existing landfill cover and install a gas management system. The landfill gas collection and treatment system shall include as necessary, a vapor phase carbon collection and treatment system and an enclosed ground flare system;

- In the CDA, 1) remove all construction debris and rubble from the surface; and 2) excavate and dispose of contaminated materials in the soil to achieve remedial action objectives (RAOs) established for the CDA soil;
- Provide city water to 39 designated homes east of the landfill, along with abandoning the existing drinking water wells from these homes. Drinking water wells on homes south of the landfill shall also be abandoned;
- Establish a long-term groundwater monitoring program for a minimum of 10 years;
- Prior to implementing the long-term groundwater monitoring program, complete a pre-design groundwater investigation study on the south, east and southeast sides of the site to determine the contaminant concentration, rate and extent of migration of all detected contaminants;
- Place institutional controls on the landfill, residential homes east and south of the landfill, Parcel F, and residential wells near the CDA; and
- Install fencing around Parcel F, the CDA, and the landfill.

This remedy is intended to meet the RAOs for the site. The RAOs identified in the 2004 ROD Amendment are:

#### **Landfill Cover and CDA:**

- To prevent exposure to landfill and CDA soil which contains carcinogens that present a total excess cancer risk above EPA's acceptable risk range of  $1 \times 10^{-4}$  to  $1 \times 10^{-6}$  for all site-related contaminants through all exposure pathways (i.e., ingestion, inhalation of soil-derived substances, and dermal contact);
- To prevent the exposure to landfill and CDA soil which contains noncarcinogens that present a total noncarcinogenic hazard index (HI) greater than 1.0 for all site-related contaminants through all exposure pathways (i.e. ingestion, inhalation of soil-derived substances, and dermal contact);
- To prevent direct contact with the landfill and CDA contents that presents a potential physical hazard; and
- To maintain the integrity of the soil cover over the long-term.

#### **Groundwater:**

- To prevent the use of groundwater which contains carcinogens in excess of MCLs or that present a total excess cancer risk above EPA's acceptable risk range of  $1 \times 10^{-4}$  to  $1 \times 10^{-6}$  for all site-related contaminants through all groundwater pathways (inhalation of volatilized substances, ingestion, and dermal contact);
- To prevent the use of groundwater which contains noncarcinogens in excess of MCLs and/or that present a total noncarcinogenic HI greater than 1.0 for all site-related

contaminants through all groundwater pathways (inhalation of volatilized substances, ingestion, and dermal contact).

- To prevent the use of groundwater which contains site-related sodium, calcium, and iron in excess of their upper intake limits or recommended dietary allowances for sensitive populations.
- To establish a groundwater-monitoring program that will ensure compliance with all of the RAOs listed above for groundwater.

#### **Air:**

- To prevent inhalation of indoor air that contains carcinogens that present a total excess cancer risk above EPA's acceptable risk range of  $1 \times 10^{-4}$  to  $1 \times 10^{-6}$  for all site-related contaminants released from the subsurface vapor migration pathway.
- To prevent inhalation of indoor air that contains noncarcinogens that present a total noncarcinogenic HI greater than 1.0 for all site-related contaminants released from the subsurface vapor migration pathway.
- To prevent the future migration of hydrogen sulphide gas and methane gas beyond the boundary of the landfill.
- To establish a landfill boundary gas monitoring program that will ensure compliance with all the RAOs listed above for air.

#### **Remedy Implementation**

After approval of the RD in June 2010, EPA issued a notice to proceed with RA to Bayer later that month. Bayer began preliminary activities at the site, such as clearing and grubbing, in the fall of 2010. Actual construction activities followed when Bayer mobilized to the site on March 21, 2011 and started construction of the enhanced cover and gas management system. Removal of surface debris and contaminated soil from the CDA was completed by November 2011. After demobilizing for winter in December 2011, work on the landfill resumed in late April 2012 until construction was completed in June 2012. EPA conducted a pre-final construction inspection on June 14, 2012, followed by an Agency letter to Bayer on June 21, 2012 describing the remaining activities (punch list) to be completed. On June 29, 2012, Bayer submitted correspondence to EPA indicating completion of remaining activities at the site, in accordance with EPA's June 21<sup>st</sup> letter. Prior to initiation of work in the landfill, Bayer completed the water hookups of the 39 homes located east of the site, along with abandonment of the drinking water wells found in those homes. While there may have been a few homes on the east side that declined free water hookups provided by Bayer, EPA has been told that either the resident decided to connect themselves (1 home), the house was vacant (1 home), or was being sold (1 home). Efforts to notify these residents were made by Bayer to the satisfaction of EPA. The ROD Amendment also required the abandonment of drinking water wells from 7 residences located south of the landfill. These homes south of the landfill were provided city water back in the 1990s. Bayer subsequently completed the abandonment of these drinking water wells by mid-July 2012.

#### **III. Demonstration of Cleanup of Activity QA/QC**

A Construction Quality Assurance Plan (CQAP) was prepared in conjunction with the remedial design to address the activities necessary to ensure compliance with the requirements of the remedy. The protocols contained in the CQAP were employed

during construction to ensure that the construction of the engineered barrier was performed in accordance with the ROD Amendment and RD plans and specifications. Details of the procedures used to ensure the quality of the construction work were in the approved CQAP.

The construction completion activities at the site were consistent with the ROD Amendment, the Scope of Work (SOW) in the CD, and the approved RD plans and specifications.

#### **IV. Activities and Schedule for Site Completion**

The following post-construction activities will be completed according to the schedule, below:

<b>Activity</b>	<b>Estimated Completion Date</b>	<b>Responsible Organization</b>
Completion of RA Report	August 31, 2012	PRP
1 <sup>st</sup> Five-Year Review Report	March 21, 2016	EPA
Final Closeout Report	March 2029	EPA
Deletion from NPL	June 2029	EPA

#### **V. Summary of Remediation Costs**

##### **ROD Estimate of Capital Costs and Annual O&M Costs**

The capital cost for the selected remedy was estimated in the ROD Amendment to be approximately \$3,007,932. Operation & Maintenance (O & M) cost was estimated to be \$3,147,028. Total present work cost was estimated at \$7,475,388, assuming 30 years of O & M.

##### **Construction Contract Award Amount**

The Himco site is a PRP-lead site and Bayer is not required to provide EPA with construction cost information.

##### **Five-Year Review**

Pursuant to CERCLA Section 121(c) and as provided in the current guidance on Five-Year Reviews: OSWER Directive 9355.7-02, Structure and Components of Five-Year Reviews, May 23, 1991, OSWER Directive 9355.702A, Supplemental Five-Year Guidance, July 26, 1994, and the Second Supplemental Five-Year Review Guidance, December 21, 1995, EPA must conduct a statutory Five-Year Review at the Himco site since hazardous substances will remain at the site above health-based levels that allow unrestricted exposures after completion of the remedial action; the ROD Amendment for the site was signed on September 14, 2004; and the Remedial Action was selected under



CERCLA §121. The first Five-Year Review will be completed five years after the Remedial Action start date of March 21, 2011.

Richard C. Karl

Richard C. Karl, Director  
Superfund Division  
U.S. Environmental Protection Agency

7-19-12

Date



**CONESTOGA-ROVERS  
& ASSOCIATES**

651 Colby Drive, Waterloo, Ontario, N2V 1C2  
Telephone: (519) 884-0510 Fax: (519) 884-0525  
[www.CRAworld.com](http://www.CRAworld.com)

June 29, 2012

Reference No. 039611

Mr. Rosauro del Rosario  
Remedial Project Manager  
United States Environmental Protection Agency  
Region 5  
77 West Jackson Boulevard  
Mail Code SR-6J  
Chicago, IL 60604-3507

**TRANSMITTED BY EMAIL**

Dear Mr. del Rosario:

Re: Pre-Final Construction Inspection Report and Completion of Punch List Items  
Himco Site, Elkhart, Indiana (Site)

On behalf of the Himco Site Trust, Conestoga-Rovers & Associates (CRA) is pleased to submit this Pre-Final Construction Report. Also included herein is documentation that we have addressed the punch list items identified during the pre-final construction inspection.

Section III Task 4, Item 4.3 of the Statement of Work (SOW) requires that the Performing Settling Defendants submit a Pre-Final Construction Report within 15 days of the pre-final construction inspection, which was held on June 14, 2012. Per the SOW:

*4.3 The pre-final inspection report must:*

*4.3.1 Outline the outstanding construction items and document corrective actions required to resolve the items*

*4.3.2 Establish a completion date for the documented corrective actions*

*4.3.3 Provide a proposed date for the final inspection*

On June 19, 2012, CRA send USEPA an email message containing draft meeting minutes and punch list items identified during the pre-final construction inspection. The Himco Site Trust received your June 21, 2012 letter and concurs with the punch list items identified in your letter. A copy of your letter is provided in Attachment A.

CRA addressed the punch list items and construction is now complete. Photographs of the improvements are provided in Attachment B, as discussed during the pre-final construction inspection. As discussed during the pre-final construction inspection, we understand that USEPA will not require a final construction inspection.



**CONESTOGA-ROVERS  
& ASSOCIATES**

June 29, 2012

Reference No. 039611

- 2 -

Since the SOW states that the Construction Completion Report is due 30 days after the final construction inspection, we propose to submit the Construction Completion Report within 30 days of receipt of USEPA approval of this Pre-Final Construction Inspection Report.

With respect private well abandonment, Mr. Tom Lenz has sent several emails on June 27 and June 28, 2012 that provides an update on the status of these items and planned next steps. We will continue to provide updates to USEPA on this matter.

Should you have any questions, please call me at (519) 884-0510.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

Denise Gay Quigley

DQ/lp/39

Encl.

cc: Doug Petroff, IDEM  
Karen Oden, USACE  
Gary Toczyłowski, Bayer HealthCare  
Tom Lenz, Bayer HealthCare  
Alan Van Norman, CRA  
Tim Leo, CRA

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ATTACHMENT A



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD

CHICAGO, IL 60604-3590

June 21, 2012

REPLY TO THE ATTENTION OF:

SR-6J

Mr. Gary Toczykowski  
Bayer HealthCare  
Bayer Diabetes Care  
555 White Plains Road  
Tarrytown, NY 10591

Re: Himco Dump Superfund Site, Elkhart, Indiana  
June 14, 2012 Pre-final Inspection

Dear Mr. Toczykowski:

The United States Environmental Protection Agency (EPA), assisted by the Indiana Department of Environmental Management (IDEM) and the U.S. Army Corps of Engineers (Corps), has prepared a punch list of items to be completed as a result of the pre-final construction inspection conducted by EPA, IDEM, and Bayer on June 14, 2012 at the Himco Dump Superfund Site (Site) in Elkhart, Indiana. EPA has prepared this document in accordance with Section III, Task 4 of the Statement of Work (SOW), Appendix B of the Consent Decree (Civil Action No. 2:07-cv-304-TS). EPA and IDEM agree that, as a result of the pre-final inspection, Bayer shall address the following construction-related items before EPA can designate the site as being construction complete in accordance with the Consent Decree:

1. Passive Venting Trench (PVT): Bayer shall install a sample and flow velocity port on PVT 2;
2. Storm Water Diversion Berms: Bayer shall reshape the riprap lining on the diversion berm located at the southeast corner of the landfill on the 90 degree bend such that surface runoff does not short flank the riprap. This riprap does not appear to be on the design drawings; however, it is beneficial that it be positioned on the 90 degree bend; and
3. Rip Rap: Bayer shall complete the repair of the northeast rip rap lined apron that was being repaired at the time of the inspection. Rip rap that was clogged with silt was being removed and replaced.

EPA requests that these punch-list items be performed by June 30, 2012, at the latest.

Based on discussions held onsite after completion of the inspection, all parties (EPA, IDEM, and Bayer) concurred on this punch list. On a minor note, EPA asked for and Bayer agreed to providing copies of the key to the site gates (copies to EPA, IDEM, and the Corps). Also, there is an assumption that the correct seed mix was used for seeding, in accordance with the approved

plans. For your convenience, a checklist of items inspected during the pre-final inspection is included in this letter, along with photos taken of the site at the time of the inspection (see attached).

Another important issue that requires Bayer's immediate attention is completing the abandonment of all drinking water wells on properties southeast of the landfill. Until all wells have been abandoned by Bayer, EPA cannot certify that the remedial action has been completed in accordance with Section XIV, Paragraph 50.b of the Consent Decree.

If you have any questions on this matter, I can be reached at (312) 886-6195.

Sincerely,

A handwritten signature in cursive script, appearing to read "R. del Rosario".

Ross del Rosario  
Remedial Project Manager

Enclosure

Cc: Karen L. Oden, USACE  
Doug Petroff, IDEM  
Denise Quigley, CRA



Checklist

Prefinal Inspection – HIMCO Site

Elkhart, Indiana

June 14, 2012

1. Security Fencing

a. Alignment

Observed to be in proper alignment

b. Condition

Observed to be in good condition

c. Gated Access Points

Three gated access points were noted during the inspection. The western construction access gate was locked and concrete jersey barriers placed to discourage trespassers. An old quarry gate was noted on the east fence. This gate was not used during construction and is not required for maintenance access. The third gate, located off of County Road 10 at the southeast corner of the landfill will remain in place for maintenance access.

d. Gate Keys

The USEPA requested 3 keys to the site. One for the USEPA, the state of Indiana and for the Corps of Engineers.

2. Perimeter Access Road and Turnaround

a. 6" Gravel

Observed to be in proper alignment and in good condition

b. 8 ounce/sy nonwoven geotextile

Spot checked, observed to be in proper location and in good condition

3. Gas Collection System

a. Monitoring Probes SGP 110-114

i. Casings, lids and locks

All casings and lids were found in good condition, each probe had a lock

ii. Concrete surface seals

All concrete surface seals were in good condition, formwork was still in place

iii. Stopcock and Hose Barb assembly

Each stopcock and hose barb assembly found to be in good condition, each ball valve was operated

b. Trench Ventilator System

i. Turbine and Riser Pipes

Each turbine and riser pipe was observed and found to be in good condition, all turbines were spinning due to windy conditions

ii. Access Ports

1. Sample Ports

PVT 2 did not have a sample port – needs to be completed

2. Flow Velocity Ports

PVT 2 did not have a flow velocity port – needs to be completed

4. Top Soil (Type S2)

a. 6" thickness

Thickness was not observable

b. Friable loam neither of heavy clay nor of very light sandy nature

Topsoil was spot checked and was adequate

5. Rooting Zone (Type S1)

a. 12" thickness

was not observable

b. Lean Clay

was not observable

6. Storm Water Diversion Berms

a. Lean Clay located below 6 inches of topsoil

was not observable

b. Positive Drainage along alignment

All berms were walked and appeared to have positive drainage and were well graded

c. Check for erosion

No erosion was noted

d. Seeding

All areas were seeded

e. Riprap lining

The riprap lining on the diversion berm located at the southeast corner of the landfill on the 90 degree bend requires reshaping such that surface runoff does not short flank the riprap. This riprap does not appear to be on the design drawings. However, it is beneficial that it be positioned on the 90 degree bend. The QC engineer directed the repair of this at the time of the inspection.

7. Storm Water Riprap Confluence

a. 24" Riprap

The north east rip rap lined apron was being repaired at the time of the inspection.  
Rip rap that was clogged with silt was being removed and replaced.

b. 8 ounce/sy nonwoven geotextile

was not observable

c. Sloped to drain

All aprons appeared to drain

8. Cover Surface

a. Topography

All areas were well graded

b. Check for erosion

No erosion was observed

c. Seeding

All areas were seeded

9. Monitoring Well Extensions

a. Casings, lids and locks

The monitoring wells within the security fence were observed. All casings  
and lids were observed, locks were in place.

b. Concrete surface seals

All concrete surface seals were in good condition

Site Clean-up

c. Silt Fences

Silt fences are to remain in place to biodegrade

d. Laydown and Trailer Area

The trailers have been removed. The laydown area was nearly cleaned up.

Prepared by: Donald Moses, P.E.

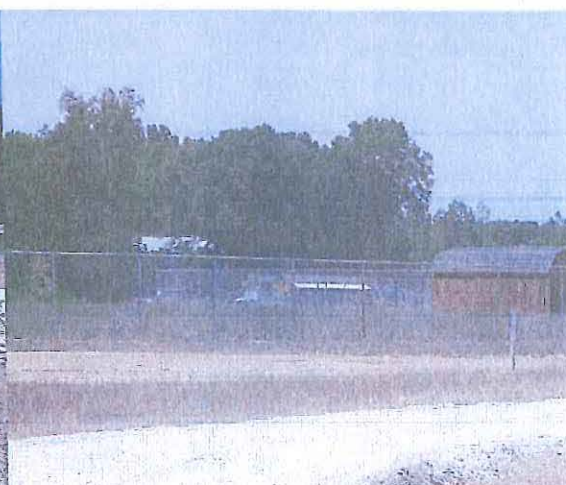
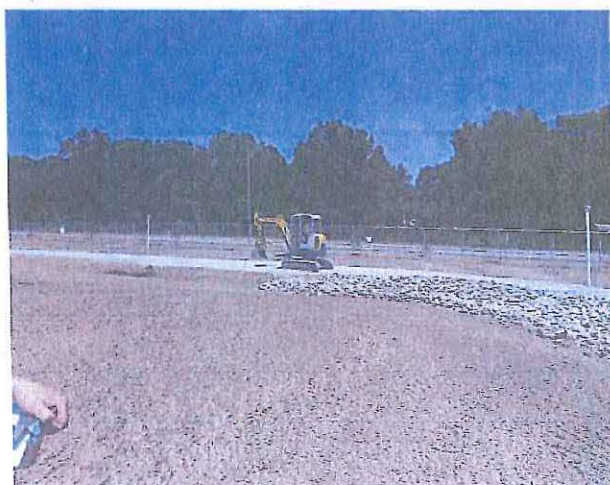
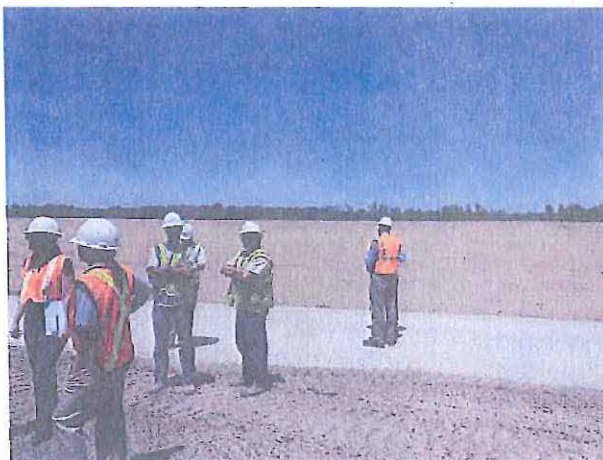
Civil Engineer

Geotechnical Engineering and Sciences Branch

Omaha District, Corps of Engineers

Donald Moses June 21, 2012

Himco Dump Superfund Site, Elkhart, Indiana  
Prefinal Inspection – June 14, 2012  
Photos taken by: Ross del Rosario (RPM)



## ATTACHMENT B





Photograph 1 – PVT2 sample port fittings installed



Photograph 2 – PVT2 sample port fittings installed

## SITE PHOTOGRAPHS





Photograph 3 – Southeast corner diversion berm rip rap re-shaped to prevent short flanking



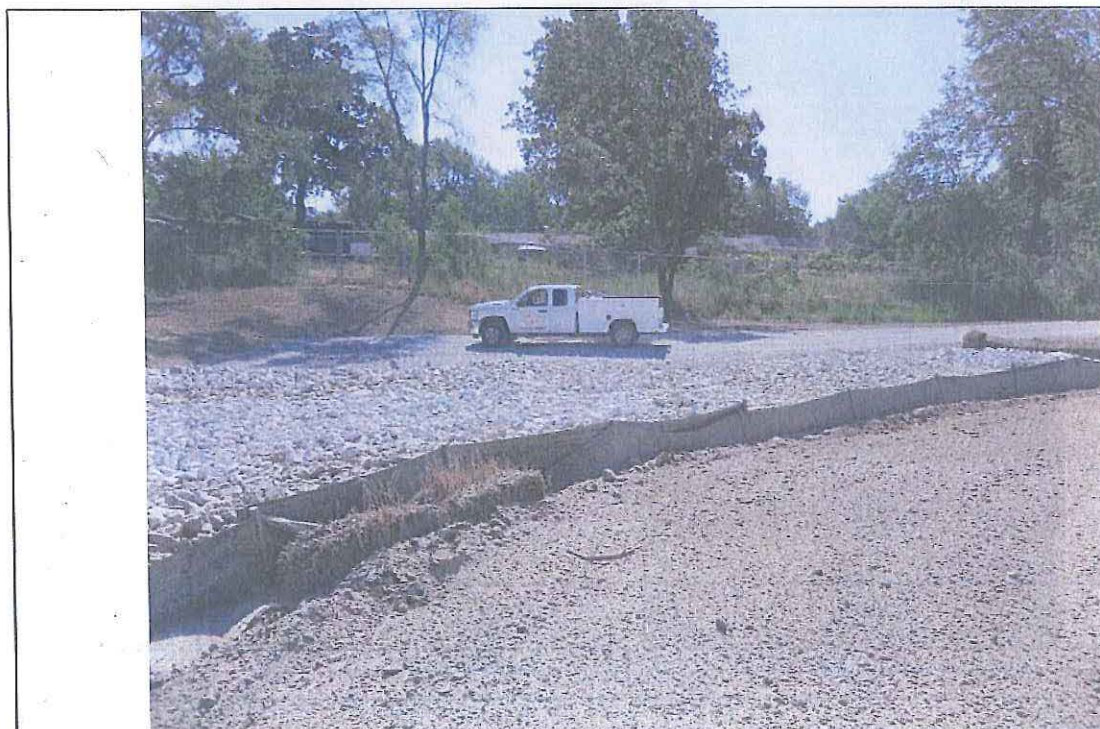
Photograph 4- Southeast corner diversion berm rip rap re-shaped to prevent short flanking

## SITE PHOTOGRAPHS





Photograph 5 - Southeast corner diversion berm rip rap re-shaped to prevent short flanking



Photograph 6 – Northeast rip rap lined apron repairs completed. Silt clogged rip rap removed.

## SITE PHOTOGRAPHS





Photograph 7 - Northeast rip rap lined apron repairs completed. Silt clogged rip rap removed.



Photograph 8 - Key locks installed on all soil gas probes and monitoring wells.

## SITE PHOTOGRAPHS

## Attachment 4

### Approval of Construction Completion/Completion of RA Report



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

SEP 13 2012

SR-6J

Mr. Gary Toczyłowski  
Bayer HealthCare  
Bayer Diabetes Care  
555 White Plains Road  
Tarrytown, New York 10591

Re: Himco Dump Superfund Site, Elkhart, Indiana Consent Decree No. 2:07-cv-304-TS  
Construction Completion Report/Completion of Remedial Action Report

Dear Mr. Toczyłowski:

The U.S. Environmental Protection Agency, with assistance from the Indiana Department of Environmental Management (IDEM), has reviewed the subject report, dated August 14, 2012. In accordance with Section XI, Paragraph 37(c) of the Consent Decree, the subject report is approved with the following modifications:

- Front cover – Please insert a date in the front cover.
- Page 25, paragraph 7.4 Rooting Zone Material Placement. It is stated that the grain size distribution and analytical data for the rooting zone material is presented in Appendix G. This could not be located. Please indicate where this information is found in the report.
- Page 26, paragraph 7.5 Topsoil Material Placement. Please describe and place the QA/QC results of topsoil samples in Appendix G.
- Figure 4.1: Residential wells RW4 through RW9 in the homes located in the CDA are depicted in this figure as not being abandoned. Based on previous conversations between EPA and CRA, it was our understanding that some residential wells in the homes located in the CDA could not be found. To clarify the situation with these wells, please indicate in Figure 4.1 whether these wells could not be found, and therefore, were not abandoned. If it helps, another legend explaining the situation with these wells could be inserted in the figure.
- Table 4.1 does not list the residential well designations shown on Figure 4.1. Please add a column for these designations.

As part of the revised report, please include a CD copy that includes the report, along with the appendices.

Your prompt attention on this matter is appreciated. If you have any questions on this matter, please contact Mr. Ross del Rosario of my staff at (312) 886-6195.

Sincerely,

A handwritten signature in black ink, appearing to read "Tom Short", with a long horizontal flourish extending to the right.

Thomas R. Short, Jr., Chief  
Remedial Response Branch 2

Cc: Larry Johnson, ORC  
Doug Petroff, IDEM

# Attachment 5

## Methane Gas Data



TABLE 1

**SOIL GAS MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA**

<i>Location</i>	<i>Date</i>	<i>Pressure</i>	<i>Gas Quality/Combustible Gas Concentrations</i>			
		<i>(in H<sub>2</sub>O)</i>	<i>Methane %<sup>1</sup></i>	<i>CO<sub>2</sub> %<sup>1</sup></i>	<i>O<sub>2</sub> %<sup>1</sup></i>	<i>H<sub>2</sub>S ppm</i>
SGP-100	9/21/2012	0.0	0.0	6.1	16.3	0
	12/28/2012	0.0	2.1	7.4	15.4	0
	3/27/2013	0.0	3.4	6.2	18.8	0
	6/27/2013	0.0	0.3	15.1	6.8	0
	9/25/2013	0.0	0.1	6.0	16.9	0
	12/23/2013	0.0	0.5	6.3	16.1	0
	3/27/2014	0.0	2.6	9.4	9.1	0
	6/26/2014	0.0	28.8	35.9	0.0	0
	6/27/2014	0.0	22.2	38.7	0.0	0
	6/30/2014	0.05	5.9	30.4	0.0	0
	7/1/2014	0.0	11.1	31.3	0.1	0
	7/2/2014	0.0	13.3	32.3	0.1	1
	7/3/2014	0.0	4.5	28.6	0.0	0
	7/7/2014	0.0	0.2	24.6	1.2	0
	7/8/2014	0.0	0.4	25.4	0.9	0
	7/9/2014	0.0	0.0	22.1	3.7	0
	7/10/2014	0.0	0.0	17.9	6.8	0
	7/11/2014	0.01	0.0	16.0	8.2	0
	7/17/2014	-0.01	0.0	15.7	7.9	0
	7/24/2014	0.0	0.0	8.1	14.0	1
	7/31/2014	0.0	0.0	7.6	14.2	0
	9/24/2014	0.0	0.0	11.4	11.9	0
	12/12/2014	0.0	0.0	14.3	8.7	0
	1/30/2015	-0.06	0.0	2.7	16.3	0
	2/24/2015	0.0	0.0	3.6	15.7	0
SGP-101	9/21/2012	0.0	0.0	4.0	17.0	0
	12/28/2012	0.0	0.1	0.2	20.2	0
	3/27/2013	0.0	0.0	0.2	21.9	0
	6/27/2013	0.0	0.0	3.1	16.9	0
	9/25/2013	0.0	0.0	2.0	18.9	0
	12/23/2013	0.0	0.0	0.7	20.6	0
	3/27/2014	0.0	0.0	0.3	20.7	0
	6/26/2014	0.0	0.0	2.2	17.5	0
	6/30/2014	0.05	0.0	1.5	19.9	0
	7/1/2014	0.0	0.0	1.4	18.9	0
	7/2/2014	0.0	0.0	1.2	18.8	1
	7/3/2014	0.0	0.0	2.0	18.5	0
	9/24/2014	0.0	0.0	1.2	18.8	0
	12/12/2014	0.0	0.0	0.4	21.3	0
	1/30/2015	0.0	0.0	0.5	17.4	0
	2/24/2015	0.0	0.0	0.2	17.3	0

**SOIL GAS MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA**

<i>Location</i>	<i>Date</i>	<i>Pressure</i>	<i>Gas Quality/Combustible Gas Concentrations</i>			
		<i>(in H<sub>2</sub>O)</i>	<i>Methane %<sup>1</sup></i>	<i>CO<sub>2</sub> %<sup>1</sup></i>	<i>O<sub>2</sub> %<sup>1</sup></i>	<i>H<sub>2</sub>S ppm</i>
SGP-102	9/21/2012	0.0	0.0	3.8	16.1	0
	12/28/2012	0.0	0.0	0.9	20.0	0
	3/27/2013	0.0	0.0	0.7	21.6	0
	6/27/2013	0.0	0.0	2.9	16.3	0
	9/25/2013	0.0	0.0	2.9	15.8	0
	12/23/2013	0.0	0.0	2.3	20.0	0
	3/27/2014	0.0	0.0	0.6	19.6	0
	6/26/2014	0.0	0.0	3.6	16.1	0
	6/30/2014	0.05	0.0	3.8	17.8	0
	7/1/2014	0.0	0.0	3.5	15.5	0
	7/2/2014	-0.01	0.0	3.5	16.1	0
	7/3/2014	0.0	0.0	3.4	17.5	0
	9/24/2014	0.0	0.0	2.2	17.6	0
	12/12/2014	0.0	0.0	1.7	19.3	0
	1/30/2015	-0.01	0.0	1.3	16.7	0
	2/24/2015	0.00	0.0	1.0	18.3	0
SGP-103	9/21/2012	0.0	2.6	9.7	0.3	0
	12/28/2012	0.0	0.2	5.9	1.4	0
	3/27/2013	0.0	0.0	4.1	7.1	0
	6/27/2013	0.0	0.0	10.6	1.4	0
	9/25/2013	0.0	0.0	9.8	6.2	0
	12/23/2013	0.0	0.0	6.2	8.4	0
	3/27/2014	0.0	0.0	0.0	20.4	0
	6/26/2014	0.0	0.0	9.1	6.4	0
	6/30/2014	0.0	0.0	10.2	4.8	0
	7/1/2014	0.0	0.0	9.8	4.4	0
	7/2/2014	0.0	0.0	10.1	4.5	0
	7/3/2014	0.0	0.0	10.6	4.4	0
	9/24/2014	0.0	0.0	5.9	11.7	0
	12/12/2014	0.0	0.0	7.7	6.0	0
	1/30/2015	0.0	0.1	6.3	6.9	0
	2/24/2015	0.0	0.0	5.7	6.0	0
SGP-104	9/21/2012	0.0	0.0	8.4	12.1	0
	12/28/2012	0.0	0.2	3.4	12.6	0
	3/27/2013	0.0	0.0	2.5	18.8	0
	6/27/2013	-0.3	0.0	7.2	12.5	0
	9/25/2013	0.0	0.0	5.0	15.9	0
	12/23/2013	-0.02	0.0	1.9	19.8	0
	3/27/2014	0.0	0.0	0.6	20.4	0
	6/26/2014	0.0	0.0	5.8	13.2	0

TABLE 1

**SOIL GAS MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA**

Location	Date	Pressure	Gas Quality/Combustible Gas Concentrations			
		(in H <sub>2</sub> O)	Methane % <sup>1</sup>	CO <sub>2</sub> % <sup>1</sup>	O <sub>2</sub> % <sup>1</sup>	H <sub>2</sub> S ppm
SGP-105	6/30/2014	0.0	0.0	7.2	11.6	0
	7/1/2014	0.0	0.0	6.8	10.8	0
	7/2/2014	0.0	0.0	7.3	10.1	0
	7/3/2014	0.01	0.0	7.6	10.3	0
	9/24/2014	0.0	0.0	4.4	18.3	0
	12/12/2014	0.0	0.0	2.1	19.2	0
	1/30/2015	-0.01	0.0	1.4	17.7	0
	2/24/2015	0.01	0.0	1.4	19.1	0
	9/21/2012	0.0	0.0	17.3	4.8	0
	12/28/2012	0.0	0.3	3.4	17.6	0
	3/27/2013	0.0	0.0	5.6	17.6	0
	6/27/2013	0.0	0.0	16.0	4.0	0
	9/25/2013	0.0	0.0	10.4	11.9	0
	12/23/2013	0.0	0.0	6.3	16.0	0
	3/27/2014	0.0	0.0	0.6	19.5	0
	6/26/2014	0.0	0.0	11.3	6.8	0
	6/30/2014	0.03	0.0	12.9	4.6	0
	7/1/2014	0.0	0.0	12.4	4.4	0
	7/2/2014	0.0	0.0	12.9	4.1	0
	7/3/2014	0.0	0.0	13.1	4.0	0
	9/24/2014	0.0	0.0	8.9	11.3	0
	12/12/2014	0.0	0.0	3.6	18.5	0
	1/30/2015	0.0	0.0	4.4	16.0	0
	2/24/2015	0.0	0.0	4.2	17.3	0
SGP-106	9/21/2012	0.0	0.0	13.0	10.9	0
	12/28/2012	0.0	0.7	9.8	15.4	0
	3/27/2013	0.0	3.5	15.8	11.2	0
	6/27/2013	0.0	2.5	27.0	0.1	0
	9/25/2013	0.0	0.0	8.8	13.7	0
	12/23/2013	-0.01	0.0	6.1	16.6	0
	3/27/2014	0.05	0.7	15.4	5.5	0
	6/26/2014	0.01	13.0	29.3	0.1	0
	6/27/2014	0.02	15.2	32.2	0.0	0
	6/30/2014	0.03	11.4	31.5	0.0	0
	7/1/2014	0.03	13.6	31.0	0.1	0
	7/2/2014	0.0	5.0	12.4	8.6	0
	7/3/2014	0.0	8.5	28.8	0.0	0
	7/7/2014	0.01	9.5	29.5	0.0	0
	7/8/2014	0.0	10.3	30.1	0.0	0
	7/9/2014	-0.01	4.6	28.2	0.0	0

**SOIL GAS MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA**

<i>Location</i>	<i>Date</i>	<i>Pressure</i>	<i>Gas Quality/Combustible Gas Concentrations</i>			
		<i>(in H<sub>2</sub>O)</i>	<i>Methane %<sup>1</sup></i>	<i>CO<sub>2</sub> %<sup>1</sup></i>	<i>O<sub>2</sub> %<sup>1</sup></i>	<i>H<sub>2</sub>S ppm</i>
SGP-107	7/10/2014	0.0	3.9	25.4	0.0	0
	7/11/2014	0.0	0.9	24.3	1.3	0
	7/17/2014	0.0	1.1	24.2	1.4	0
	7/24/2014	0.0	0.0	21.0	2.8	1
	7/31/2014	0.0	0.0	16.5	7.5	0
	9/24/2014	0.0	0.0	20.9	1.9	0
	12/12/2014	0.0	0.0	5.2	16.0	0
	1/30/2015	0.0	0.0	2.6	17.5	0
	2/24/2015	0.01	0.0	5.5	14.3	0
	9/21/2012	0.0	24.9	32.6	0.9	0
	9/24/2012	0.0	29.6	34.0	0.1	0
	9/25/2012	0.0	29.7	34.6	0.1	0
	9/26/2012	0.0	18.4	29.2	2.2	0
	9/27/2012	0.0	28.1	34.0	0.5	0
	9/28/2012	0.0	28.2	33.6	0.0	0
	9/28/2012 <sup>2</sup>	0.0	28.0	33.2	0.7	0
	10/1/2012 <sup>3</sup>	0.0	29.1	34.6	0.0	0
	10/1/2012 <sup>2</sup>	0.0	29.0	34.4	0.3	0
	10/2/2012	0.0	16.2	22.3	3.6	0
	10/3/2012	0.0	19.3	26.7	0.9	0
	10/4/2012	0.0	25.3	32.6	0.0	0
	10/5/2012	0.0	26.5	35.0	0.1	0
	10/12/2012	0.0	20.0	26.4	2.2	0
	10/19/2012	0.0	27.7	32.2	0.9	0
	12/28/2012	0.0	25.1	25.2	0.6	0
	1/3/2013	0.0	24.6	23.8	1.6	0
	1/10/2013	0.0	22.5	24.6	2.2	0
	1/17/2013	0.0	11.6	9.1	11.7	0
	2/28/2013	0.0	0.0	0.2	20.8	0
	3/27/2013	0.0	32.3	16.1	0.8	0
	4/25/2013	0.0	0.1	0.1	20.7	0
	5/29/2013	0.0	28.4	27.4	0.1	0
	6/27/2013	0.0	31.4	32.0	0.0	5
	7/25/2013	0.0	38.8	36.0	0.0	4
	8/29/2013	0.0	33.1	35.2	0.0	4
	9/25/2013	0.0	19.9	3.2	0.5	0
	11/27/2013	0.0	17.7	15.2	0.5	0
	12/17/2013	0.02	4.8	13.8	2.7	0
	12/23/2013	0.18	0.7	1.8	19.2	0
	1/29/2014	0.0	0.5	1.8	0.7	0
	2/25/2014	-0.01	0.4	1.0	4.3	0

TABLE 1

**SOIL GAS MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA**

<i>Location</i>	<i>Date</i>	<i>Pressure (in H<sub>2</sub>O)</i>	<i>Gas Quality/Combustible Gas Concentrations</i>			
			<i>Methane %<sup>1</sup></i>	<i>CO<sub>2</sub> %<sup>1</sup></i>	<i>O<sub>2</sub> %<sup>1</sup></i>	<i>H<sub>2</sub>S ppm</i>
	3/27/2014	1.38	0.2	0.3	16.2	0
	4/24/2014	0.01	7.58	13.8	11.6	5
	6/26/2014	-0.47	15.9	8.8	0.3	3
	6/27/2014	0.03	17.8	11.0	2.4	4
	6/30/2014	0.03	27.0	29.0	0.0	18
	7/1/2014	-0.6	22.3	18.4	0.9	23
	7/2/2014	-0.31	3.3	10.1	0.6	1
	7/3/2014	0.01	4.1	11.0	0.3	2
	7/7/2014	0.31	29.7	16.0	0.6	14
	7/8/2014	0.72	18.1	13.9	0.1	4
	7/9/2014	0.0	10.9	14.4	0.4	4
	7/10/2014	0.0	8.1	16.7	0.7	7
	7/11/2014	0.0	12.8	21.5	0.0	10
	7/17/2014	0.01	3.4	13.7	0.2	1
	7/24/2014	0.01	0.0	6.7	9.9	0
	7/31/2014	0.0	6.1	22.4	0.0	6
	9/24/2014	0.0	0.0	6.2	2.0	0
	12/12/2014	0.16	0.2	1.7	16.4	0
	1/30/2015	0.13	0.1	2.0	3.6	0
	2/24/2015	0.0	0.0	3.6	1.3	0
SGP-108	9/21/2012	0.0	0.0	9.8	6.7	0
	12/28/2012	1.2	8.6	3.1	2.1	0
	1/3/2013	0.0	8.4	2.7	3.3	0
	1/10/2013	0.0	7.8	2.7	6.6	0
	1/17/2013	0.0	0.5	0.0	19.8	0
	2/28/2013	0.0	0.0	0.2	21.1	0
	3/27/2013	0.0	15.7	5.9	3.6	0
	4/25/2013	0.0	7.6	3.0	11.7	0
	5/29/2013	0.0	6.6	11.5	0.0	0
	6/27/2013	0.0	0.0	8.3	5.0	0
	7/25/2013	0.0	0.2	10.4	4.5	20
	8/29/2013	0.0	0.0	11.1	4.7	1
	9/25/2013	0.0	0.0	3.5	15.4	0
	11/27/2013	0.0	0.8	1.4	19.8	0
	12/17/2013	0.05	9.7	7.3	2.3	0
	12/23/2013	-0.05	0.1	0.5	20.6	0
	1/29/2014	0.13	7.1	2.5	9.8	0
	2/25/2014	0.04	9.3	3.7	9.0	0
	3/27/2014	0.0	0.4	2.0	19.0	0
	4/24/2014	0.0	0.0	0.2	20.5	0
	6/26/2014	0.0	1.3	1.7	16.9	0

**SOIL GAS MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA**

<i>Location</i>	<i>Date</i>	<i>Pressure (in H<sub>2</sub>O)</i>	<i>Gas Quality/Combustible Gas Concentrations</i>			
			<i>Methane %<sup>1</sup></i>	<i>CO<sub>2</sub> %<sup>1</sup></i>	<i>O<sub>2</sub> %<sup>1</sup></i>	<i>H<sub>2</sub>S ppm</i>
SGP-109	6/30/2014	0.0	2.8	4.6	14.0	0
	7/1/2014	0.0	3.0	5.6	10.0	0
	7/2/2014	0.01	0.9	2.2	16.3	0
	7/3/2014	0.0	3.4	8.3	7.8	0
	9/24/2014	0.0	9.7	12.5	0.2	0
	12/12/2014	0.0	0.2	1.0	20.5	0
	1/30/2015	0.0	0.0	0.2	20.0	0
	2/24/2015	0.01	3.3	3.2	11.7	0
	9/21/2012	0.0	1.3	8.4	6.3	0
	12/28/2012	1.5	8.8	5.7	0.3	0
	1/3/2013	0.0	3.4	3.4	12.1	0
	1/10/2013	0.0	5.9	5.2	4.0	0
	1/17/2013	0.0	9.2	5.4	1.1	0
	2/28/2013	0.0	12.7	5.1	1.4	0
	3/27/2013	0.0	2.3	2.6	12.9	0
	4/25/2013	0.0	0.2	0.2	16.4	0
	5/29/2013	0.0	7.4	8.5	0.7	0
	6/27/2013	0.0	11.5	9.1	0.1	0
	7/25/2013	0.0	6.1	10.8	0.3	0
	8/29/2013	0.0	8.7	10.6	0.0	0
	9/25/2013	0.0	10.6	8.1	0.6	0
	11/27/2013	0.0	9.4	7.0	0.0	0
	12/17/2013	0.03	0.9	6.6	0.2	0
	12/23/2013	-0.07	3.6	4.7	8.9	0
	1/29/2014	-0.04	9.6	4.9	0.3	0
	2/25/2014	0.04	11.0	5.6	0.0	0
	3/27/2014	0.17	4.4	2.0	14.0	0
	3/28/2014	0.18	4.4	2.0	14.0	0
	4/24/2014	0.24	9.9	5.6	0.0	0
	6/26/2014	0.09	9.5	9.4	0.2	0
	6/27/2014	0.09	11.0	10.1	0.0	0
	6/30/2014	-0.19	9.3	10.3	0.0	0
	7/1/2014	0.06	7.3	9.3	0.2	0
	7/2/2014	0.01	7.7	9.8	0.2	0
	7/3/2014	0.0	9.4	10.5	0.1	0
	7/7/2014	0.01	9.4	10.8	0.1	0
	7/8/2014	0.02	9.5	11.1	0.0	0
	7/9/2014	-0.05	9.3	11.1	0.0	1
	7/10/2014	-0.01	8.9	10.6	0.0	0
	7/11/2014	0.00	9.2	10.7	0.1	0
	7/17/2014	-0.01	8.6	11.9	0.1	1

TABLE 1

**SOIL GAS MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA**

<i>Location</i>	<i>Date</i>	<i>Pressure</i>	<i>Gas Quality/Combustible Gas Concentrations</i>			
		<i>(in H<sub>2</sub>O)</i>	<i>Methane %<sup>1</sup></i>	<i>CO<sub>2</sub> %<sup>1</sup></i>	<i>O<sub>2</sub> %<sup>1</sup></i>	<i>H<sub>2</sub>S ppm</i>
	7/24/2014	0.03	9.3	10.5	0.1	1
	7/31/2014	0.0	8.1	10.8	0.2	0
	8/6/2014	0.04	7.3	10.7	0.1	0
	8/13/2014	-0.38	7.2	11.2	0.3	0
	8/20/2014	-0.07	8.0	10.5	0.2	0
	8/29/2014	0.02	6.2	11.4	0.1	0
	9/4/2014	-0.06	5.0	8.3	5.4	0
	9/11/2014	-0.04	6.6	10.1	2.3	0
	9/19/2014	0.01	5.1	10.7	0.0	0
	9/24/2014	0.0	4.6	10.1	0.2	0
	10/1/2104	-0.02	0.1	6.1	8.8	0
	10/10/2014	0.03	3.2	9.7	0.0	0
	10/16/2014	0.06	4.6	9.3	0.0	0
	10/21/2014	-0.07	3.3	9.3	0.0	0
	10/30/2014	0.05	3.3	9.2	0.0	0
	11/5/2014	0.06	3.2	8.4	0.0	0
	11/11/2014	0.0	3.0	8.2	0.0	0
	11/17/2014	0.05	3.1	7.3	0.1	0
	11/25/2014	-0.15	2.6	7.0	0.1	0
	12/5/2014	0.0	3.1	7.9	0.0	0
	12/12/2014	0.10	2.7	6.3	0.1	0
	12/19/2014	0.06	2.7	6.1	0.0	0
	1/30/2015	0.03	1.1	5.4	0.5	0
	2/24/2015	0.11	1.6	5.2	0.0	0
SGP-110	9/21/2012	0.0	53.5	24.4	2.1	0
	9/24/2012	0.0	55.1	26.7	0.0	0
	9/25/2012	0.0	56.7	27.9	0.1	0
	9/26/2012	0.0	60.4	27.3	0.1	0
	9/27/2012	0.0	17.0	13.5	10.5	0
	9/28/2012	0.0	58.3	25.8	0.1	0
	9/28/2012 <sup>2</sup>	0.0	38.2	22.3	3.9	0
	10/1/2012 <sup>3</sup>	0.0	53.2	24.2	2.0	0
	10/1/2012 <sup>2</sup>	0.0	34.2	22.2	4.7	0
	10/2/2012	0.0	9.3	8.9	14.3	0
	10/3/2012	0.0	14.5	10.6	11.3	0
	10/4/2012	0.0	57.1	24.8	0.9	0
	10/5/2012	0.0	58.4	26.1	0.0	0
	10/12/2012	0.0	49.4	22.5	0.0	0
	10/19/2012	0.0	10.7	8.9	3.5	0
	12/28/2012	0.0	2.5	5.9	7.9	0
	1/3/2013	0.0	0.2	1.6	19.9	0



**SOIL GAS MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA**

<i>Location</i>	<i>Date</i>	<i>Pressure</i>	<i>Gas Quality/Combustible Gas Concentrations</i>			
		<i>(in H<sub>2</sub>O)</i>	<i>Methane %<sup>1</sup></i>	<i>CO<sub>2</sub> %<sup>1</sup></i>	<i>O<sub>2</sub> %<sup>1</sup></i>	<i>H<sub>2</sub>S ppm</i>
	1/10/2013	0.0	0.3	3.7	15.3	0
	1/17/2013	0.0	0.2	0.0	19.8	0
	2/28/2013	0.0	0.0	0.3	21.3	0
	3/27/2013	0.0	0.0	0.3	21.1	0
	4/25/2013	0.0	0.1	0.2	20.2	0
	5/29/2013	0.0	0.0	0.1	20.0	0
	6/27/2013	0.0	1.8	0.7	19.1	0
	7/25/2013	0.0	3.6	2.0	18.8	0
	8/29/2013	0.0	24.7	12.0	11.2	6
	9/25/2013	0.3	0.0	3.6	16.9	0
	11/27/2013	0.0	0.5	1.1	19.9	0
	12/17/2013	0.0	0.0	1.8	19.2	0
	12/23/2013	0.0	0.0	0.1	21.9	0
	1/29/2014	0.0	0.0	0.6	16.4	0
	2/25/2014	0.01	0.0	1.0	19.8	0
	3/27/2014	0.0	0.0	0.0	19.5	0
	3/28/2014	0.0	0.0	0.0	19.5	0
	4/24/2014	0.05	0.0	2.8	17.6	0
	6/26/2014	0.04	39.2	7.2	8.9	1
	6/27/2014	0.06	20.0	3.2	15.6	3
	6/30/2014	-0.77	34.0	7.2	11.0	1
	7/1/2014	0.14	26.1	6.0	11.1	0
	7/2/2014	0.05	27.6	6.5	11.8	1
	7/3/2014	0.15	22.8	5.0	0.0	0
	7/7/2014	0.14	26.3	6.8	12.8	1
	7/8/2014	0.0	0.4	0.1	20.6	0
	7/9/2014	0.0	0.0	0.1	20.1	0
	7/10/2014	0.0	0.0	0.2	19.8	0
	7/11/2014	0.0	0.0	0.1	20.2	0
	7/17/2014	0.0	0.0	0.9	17.6	2
	7/24/2014	0.0	0.4	4.2	11.7	0
	7/31/2014	0.0	0.4	5.2	10.2	0
	8/6/2014	0.0	0.0	2.4	15.8	0
	9/24/2014	0.0	0.0	2.9	13.3	0
	12/12/2014	0.0	0.0	0.1	21.2	0
	1/30/2015	-0.04	0.0	0.5	19.8	0
	2/24/2015	0.18	0.0	1.4	13.6	0
SGP-111	9/21/2012	0.0	0.0	7.1	11.4	0
	12/28/2012	0.0	0.3	0.1	21.3	0
	3/27/2013	0.0	0.0	0.2	22.2	0
	6/27/2013	0.0	0.1	1.4	18.2	0

TABLE 1

**SOIL GAS MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA**

<i>Location</i>	<i>Date</i>	<i>Pressure</i>	<i>Gas Quality/Combustible Gas Concentrations</i>			
		<i>(in H<sub>2</sub>O)</i>	<i>Methane %<sup>1</sup></i>	<i>CO<sub>2</sub> %<sup>1</sup></i>	<i>O<sub>2</sub> %<sup>1</sup></i>	<i>H<sub>2</sub>S ppm</i>
SGP-112	9/25/2013	0.3	0.0	1.1	18.3	0
	12/23/2013	0	0.0	0.7	20.2	0
	3/27/2014	0.03	0.0	0.0	20.9	0
	6/26/2014	0.56	0.0	3.4	15.1	0
	6/30/2014	0.01	0.0	6.5	12.6	0
	7/1/2014	0.21	0.0	4.8	14.1	0
	7/2/2014	-0.08	0.0	5.6	14.5	0
	7/3/2014	0.0	0.0	3.6	17.5	0
	9/24/2014	0.0	0.0	5.6	11.7	0
	12/12/2014	0.0	0.0	0.1	21.1	0
	1/30/2015	-0.01	0.0	3.3	7.3	0
	2/24/2015	0.0	0.0	4.4	9.1	0
	9/21/2012	0.0	0.0	4.7	2.3	0
	12/28/2012	0.0	0.0	2.1	13.4	0
	3/27/2013	0.0	0.0	0.2	21.9	0
	6/27/2013	0.0	0.0	4.9	11.3	0
	9/25/2013	0.0	0.0	2.8	13.3	0
	12/23/2013	0.0	0.0	1.2	13.4	0
	3/27/2014	1.47	0.0	0.0	20.9	0
	6/26/2014	0.97	0.0	5.0	9.6	0
	6/30/2014	-0.55	0.0	4.5	12.6	0
SGP-113	7/1/2014	0.08	0.0	4.4	11.5	0
	7/2/2014	0.27	0.0	3.2	15.2	0
	7/3/2014	0.12	0.0	1.3	19.1	0
	9/24/2014	0.0	0.0	3.7	14.0	0
	12/12/2014	-0.06	0.0	0.1	21.0	0
	1/30/2015	0.01	0.0	3.5	4.3	0
	2/24/2015	0.0	0.0	4.6	5.5	0
	9/21/2012	0.0	1.4	7.6	2.0	0
	12/28/2012	0.0	0.0	3.5	9.2	0
	3/27/2013	0.0	1.9	3.5	0.7	0
	6/27/2013	0.0	3.0	5.3	5.0	0
	9/25/2013	0.0	0.0	1.1	17.8	0
	12/23/2013	0.0	0.0	1.5	17.5	0
	3/27/2014	2.12	0.0	0.0	20.9	0
	6/26/2014	0.0	0.0	5.9	4.2	0
	6/30/2014	-0.36	0.0	8.1	1.0	0
	7/1/2014	0.30	0.0	7.2	1.5	0
	7/2/2014	0.07	0.0	7.1	3.3	0
	7/3/2014	0.02	0.0	7.2	4.4	0

**SOIL GAS MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA**

<i>Location</i>	<i>Date</i>	<i>Pressure (in H<sub>2</sub>O)</i>	<i>Gas Quality/Combustible Gas Concentrations</i>			
			<i>Methane %<sup>1</sup></i>	<i>CO<sub>2</sub> %<sup>1</sup></i>	<i>O<sub>2</sub> %<sup>1</sup></i>	<i>H<sub>2</sub>S ppm</i>
SGP-114	9/24/2014	0.0	0.1	2.1	13.1	0
	12/12/2014	0.02	0.0	2.7	13.8	0
	1/30/2015	0.0	0.0	4.6	3.8	0
	2/24/2015	0.02	0.0	5.8	3.0	0
	9/21/2012	0.0	24.9	29.7	0.4	0
	9/24/2012	0.0	24.8	28.5	0.0	0
	9/25/2012	0.0	25.0	29.9	0.0	8
	9/26/2012	0.0	24.1	28.8	1.1	10
	9/27/2012	0.0	23.9	29.0	1.3	10
	9/28/2012	0.0	23.5	28.2	1.3	8
	9/28/2012 <sup>2</sup>	0.0	0.0	0.1	20.3	0
	10/1/2012 <sup>3</sup>	0.0	24.5	29.4	0.0	7
	10/1/2012 <sup>2</sup>	0.0	24.2	28.9	0.7	8
	10/2/2012	0.0	21.4	25.1	0.8	0
	10/3/2012	0.0	17.6	20.8	3.1	0
	10/4/2012	0.0	23.2	29.1	0.0	0
	10/5/2012	0.0	23.4	29.4	0.0	0
	10/12/2012	0.0	22.9	28.7	0.1	0
	10/19/2012	0.0	32.2	29.5	0.1	0
	12/28/2012	0.0	58.5	31.0	1.1	6
	1/3/2013	0.0	58.9	30.8	3.0	5
	1/10/2013	0.0	58.9	31.9	1.0	4
	1/17/2013	0.0	62.7	29.9	0.9	0
	2/28/2013	0.0	40.1	22.3	5.4	0
	3/27/2013	0.0	53.1	30.4	0.2	4
	4/25/2013	0.0	49.6	31.3	1.8	0
	5/29/2013	0.0	38.1	33.1	0.4	10
	6/27/2013	0.0	39.8	36.0	0.0	15
	7/25/2013	0.0	40.3	37.3	0.0	12
	9/25/2013	0.1	28.5	33.5	0.2	6
	11/27/2013	0.0	0.0	0.2	20.8	0
	12/17/2013	0.0	0.0	0.2	21.6	0
	12/23/2013	0.0	0.0	0.2	20.3	0
	1/29/2014	0.01	1.2	6.1	13.9	0
	2/25/2014	0.01	0.0	1.1	19.8	0
	3/27/2014	0.0	3.9	4.9	11.1	0
	4/24/2014	0.0	0.7	6.0	11.9	0
	6/26/2014	0.0	23.0	23.6	0.2	5
	6/27/2014	0.0	24.5	25.7	0.1	3
	6/30/2014	0.06	16.6	24.7	0.0	9
	7/1/2014	0.0	24.4	21.4	0.1	6

TABLE 1

SOIL GAS MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA

Location	Date	Pressure	Gas Quality/Combustible Gas Concentrations			
		(in H <sub>2</sub> O)	Methane % <sup>1</sup>	CO <sub>2</sub> % <sup>1</sup>	O <sub>2</sub> % <sup>1</sup>	H <sub>2</sub> S ppm
	7/2/2014	0.0	5.3	19.0	1.3	0
	7/3/2014	0.0	0.7	14.2	5.1	0
	7/7/2014	0.0	17.6	23.5	0.1	1
	7/8/2014	-0.01	18.9	24.5	0.2	1
	7/9/2014	-0.01	3.1	15.4	4.6	0
	7/10/2014	-0.01	1.6	15.9	2.9	1
	7/11/2014	-0.01	7	20.2	0.4	1
	7/17/2014	-0.01	27.7	26.0	0.2	0
	7/24/2014	0.0	20	16.8	7.3	1
	7/31/2014	0.0	23.5	27.9	0.0	0
	8/6/2014	0.0	18.4	18.0	7.2	0
	8/13/2014	0.0	25.4	16.4	0.4	0
	8/20/2014	0.0	27.3	23.7	1.8	0
	8/29/2014	0.0	26.5	27.6	0.1	0
	9/4/2014	-0.01	38.7	26.5	2.5	0
	9/11/2014	0.0	49.3	25.3	3.7	0
	9/19/2014	0.0	39.3	30.8	0.0	0
	9/24/2014	0.0	37.7	26.8	0.0	6
	10/1/2104	0.01	41.2	29.7	0.0	0
	10/10/2014	0.01	53.4	29.5	0.0	0
	10/16/2014	0.02	68.4	28.4	0.0	0
	10/21/2014	0.0	54.9	28.8	0.0	0
	10/30/2014	0.0	45.3	28.3	0.0	0
	11/5/2014	0.02	39	25.7	0.0	0
	11/11/2014	0.01	46.4	25.3	0.0	0
	11/17/2014	0.01	41.1	26.9	0.0	0
	11/25/2014	0.0	57.9	24.3	0.5	0
	12/5/2014	0.0	49.2	27.8	0.0	0
	12/12/2014	0.0	38.6	19.4	1.0	0
	12/19/2014	0.01	38.5	21.3	0.0	0
	1/30/2015	0.0	18.7	18.5	0.1	0
	2/24/2015	0.05	16.7	16.6	0.0	0
SGP-115	12/28/2012	1.3	34.5	36.5	1.3	0
	1/3/2013	0.0	34.8	35.6	2.4	0
	1/10/2013	0.0	35.6	36.6	6.9	0
	1/17/2013	0.0	0.3	0.0	20.2	0
	2/28/2013	0.0	0.0	0.2	20.9	0
	3/27/2013	0.0	0.0	0.3	19.5	0
	4/25/2013	0.0	0.0	0.1	20.4	0
	5/29/2013	0.0	29.5	44.7	0.3	0
	6/27/2013	0.0	30.6	49.2	0.0	0

**SOIL GAS MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA**

<i>Location</i>	<i>Date</i>	<i>Pressure</i>	<i>Gas Quality/Combustible Gas Concentrations</i>			
		<i>(in H<sub>2</sub>O)</i>	<i>Methane %<sup>1</sup></i>	<i>CO<sub>2</sub> %<sup>1</sup></i>	<i>O<sub>2</sub> %<sup>1</sup></i>	<i>H<sub>2</sub>S ppm</i>
	7/25/2013	0.0	31.6	52.3	0.0	4
	8/29/2013	0.0	30.2	49.3	0.0	11
	9/25/2013	0.0	17.8	36.1	3.1	0
	11/27/2013	0.0	33.5	32.7	0.7	5
	12/17/2013	0.14	35.6	35.1	0.0	0
	12/23/2013	-0.39	7.1	11.3	14.0	0
	1/29/2014	0.09	37.1	29.6	0.0	0
	2/25/2014	0.18	37.6	28.4	0.0	0
	3/27/2014	0.62	35.3	26.3	1.8	0
	4/24/2014	0.25	33.2	28.0	0.0	0
	6/26/2014	0.26	37.0	34.4	0.2	0
	6/27/2014	0.27	43.2	42.0	0.0	0
	6/30/2014	0.26	32.2	37.1	0.0	0
	7/1/2014	0.51	33.7	37.5	0.1	0
	7/2/2014	-0.09	0.0	0.1	20.4	0
	7/3/2014	0.0	0.0	0.2	20.2	0
	7/7/2014	0.01	15.1	20.8	5.4	0
	7/8/2014	0.02	25.3	29.9	3.1	0
	7/9/2014	-0.06	0.0	0.2	19.8	0
	7/10/2014	0.0	0.0	0.5	15.1	0
	7/11/2014	-0.01	3.3	7.4	0.1	0
	7/17/2014	-0.01	25.6	31.8	0.0	0
	9/24/2014	0.0	10.1	20.9	0.1	0
	12/12/2014	0.0	47.6	27.9	0.4	1
	1/30/2015	-0.04	43.6	24.5	0.2	1
	2/24/2015	0.25	44.2	22.5	0.0	1
SGP-116	12/28/2012	1.9	58.4	46.5	0.6	0
	1/3/2013	0.0	59.8	45.6	1.3	0
	1/10/2013	0.0	61.8	45.4	4.1	0
	1/17/2013	0.0	52.6	40.6	1.6	0
	2/28/2013	0.0	0.0	0.2	21.6	0
	3/27/2013	0.0	53.2	41.4	0.6	0
	4/25/2013	0.0	0.0	0.1	20.5	0
	5/29/2013	0.0	41.7	40.9	0.5	0
	6/27/2013	0.0	51.5	48.4	0.1	0
	7/25/2013	0.0	48.9	50.9	0.0	0
	8/29/2013	0.0	49.0	47.6	0.0	5
	9/25/2013	0.0	21.7	31.7	1.1	0
	11/27/2013	0.05	49.9	42.2	0.0	0
	12/17/2013	0.22	57.8	42.1	0.1	0
	12/23/2013	-0.50	35.6	29.4	5.4	0

**SOIL GAS MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA**

<i>Location</i>	<i>Date</i>	<i>Pressure</i>	<i>Gas Quality/Combustible Gas Concentrations</i>			
		<i>(in H<sub>2</sub>O)</i>	<i>Methane %<sup>1</sup></i>	<i>CO<sub>2</sub> %<sup>1</sup></i>	<i>O<sub>2</sub> %<sup>1</sup></i>	<i>H<sub>2</sub>S ppm</i>
	1/29/2014	0.17	57.3	39.6	0.0	1
	2/25/2014	0.44	44.6	30.4	0.0	2
	3/27/2014	0.75	44.6	30.4	4.4	0
	4/24/2014	0.44	51.4	38.4	0.0	3
	6/26/2014	0.59	50.6	49.1	0.2	6
	6/27/2014	0.46	46.0	54.2	0.0	7
	6/30/2014	0.49	46.1	47.1	0.1	12
	7/1/2014	0.75	45.9	46.8	0.2	13
	7/2/2014	-0.06	42.5	43.1	2.2	0
	7/3/2014	0.03	50.5	49.1	0.0	3
	7/7/2014	0.05	50.9	49.2	0.0	10
	7/8/2014	0.08	50.5	49.4	0.0	8
	7/9/2014	-0.04	42.5	41.7	2.3	1
	7/10/2014	-0.02	48.8	48.6	0.6	1
	7/11/2014	-0.01	49.5	47.6	0.3	1
	7/17/2014	-0.01	45.3	46.1	0.4	1
	9/24/2014	0.0	50.6	48.1	0.2	9
	12/12/2014	0.01	45.3	27.4	0.2	1
	1/30/2015	0.03	16.2	34.7	1.3	0
	2/24/2015	0.92	57	34.8	0.0	0
SGP-117S	12/28/2012	0.0	2.2	14.9	0.3	0
	1/3/2013	0.0	1.9	10.7	7.4	0
	1/10/2013	0.0	2.0	14.7	3.6	0
	1/17/2013	0.0	2.5	13.5	0.7	0
	2/28/2013	0.0	0.2	1.4	14.7	0
	3/27/2013	0.0	3.2	12.0	0.0	0
	4/25/2013	0.0	4.6	12.3	0.9	0
	5/29/2013	0.0	4.0	14.5	0.0	0
	6/27/2013	0.0	3.7	15.5	0.3	0
	7/25/2013	0.0	4.3	18.2	0.1	0
	8/29/2013	0.0	3.4	19.7	0.0	1
	9/25/2013	0.0	2.6	15.5	1.8	0
	11/27/2013	-0.1	3.6	17.0	0.4	0
	12/17/2013	0.0	3.4	16.5	0.6	0
	12/23/2013	-0.07	3.3	14.7	0.2	0
	1/29/2014	0.02	3.0	13.9	0.0	0
	2/25/2014	0.03	2.9	11.1	0.7	0
	3/27/2014	0.12	3.1	7.2	9.3	0
	4/24/2014	0.13	6.2	12.5	0.1	0
	4/30/2014	0.0	3.3	8.6	1.8	nm
	5/1/2014	0.02	5.1	12.3	0.0	0



**SOIL GAS MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA**

<i>Location</i>	<i>Date</i>	<i>Pressure</i>	<i>Gas Quality/Combustible Gas Concentrations</i>			
		<i>(in H<sub>2</sub>O)</i>	<i>Methane %<sup>1</sup></i>	<i>CO<sub>2</sub> %<sup>1</sup></i>	<i>O<sub>2</sub> %<sup>1</sup></i>	<i>H<sub>2</sub>S ppm</i>
	5/2/2014	0.02	4.7	12.7	0.0	0
	5/3/2014	-0.08	5.1	13.0	0.0	0
	5/4/2014	0.0	4.9	13.2	0.0	0
	5/5/2014	0.10	4.7	13.2	0.0	0
	5/6/2014	0.0	5.0	13.5	0.0	0
	5/7/2014	0.0	3.7	12.6	0.0	0
	5/8/2014	0.0	4.9	12.4	0.0	0
	5/9/2014	0.05	4.9	13.7	0.0	0
	5/12/2014	0.0	6.5	14.8	0.0	0
	5/13/2014	0.05	5.0	15.3	0.0	0
	5/14/2014	0.0	4.7	15.2	0.0	0
	5/15/2014	0.10	4.1	14.2	0.1	nm
	5/16/2014	0.0	4.9	14.0	0.1	nm
	5/19/2014	0.0	5.2	15.8	0.0	0
	5/27/2014	0.0	5.4	14.4	0.0	0
	6/4/2014	0.08	5.7	15.6	0.0	0
	6/12/2014	0.01	5.9	16.5	0.0	0
	6/19/2014	-0.04	5.6	17.7	0.0	0
	6/26/2014	0.03	4.9	16.0	0.2	0
	6/30/2014	0.10	3.9	16.3	0.1	0
	7/1/2014	0.0	5.6	18.1	0.0	0
	7/2/2014	-0.01	5.5	18.0	0.1	0
	7/3/2014	0.0	5.4	18.0	0.1	0
	7/7/2014	0.02	5.5	18.5	0.0	0
	7/17/2014	0.0	4.7	18.7	0.0	1
	7/24/2014	0.01	2.5	8.7	10.4	0
	7/31/2014	0.01	4.6	21.1	0.0	0
	8/6/2014	0.02	4.3	20.5	0.0	0
	8/13/2014	0.01	4.3	20.2	0.1	0
	8/20/2014	-0.05	4.6	19.8	0.0	0
	8/29/2014	0.01	4.1	20.2	0.0	0
	9/4/2014	-0.05	4.8	21.4	0.0	0
	9/11/2014	-0.03	4.6	16.2	4.8	0
	9/19/2014	0.02	4.2	21.7	0.0	0
	9/24/2014	0.0	3.8	19.2	0.1	0
	10/1/2014	-0.05	4.3	21.1	0.0	0
	10/10/2014	0.04	4.5	19.8	0.0	0
	10/16/2014	0.08	6.7	18.6	0.0	0
	10/21/2014	-0.02	4.6	18.3	0.0	0
	10/30/2014	0.05	4.1	19.0	0.0	0
	11/5/2014	0.04	4.1	18.0	0.1	0
	11/11/2014	-0.08	3.8	17.0	0.0	0

**SOIL GAS MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA**

<i>Location</i>	<i>Date</i>	<i>Pressure (in H<sub>2</sub>O)</i>	<i>Gas Quality/Combustible Gas Concentrations</i>			
			<i>Methane %<sup>1</sup></i>	<i>CO2 %<sup>1</sup></i>	<i>O2 %<sup>1</sup></i>	<i>H2S ppm</i>
SGP-117D	11/17/2014	0.0	3.6	17.7	0.2	0
	11/25/2014	-0.01	3.6	16.6	0.0	0
	12/5/2014	0.04	3.8	16.9	0.0	0
	12/12/2014	-0.04	3.7	15.4	0.0	0
	12/19/2014	0.0	3.4	15.1	0.0	0
	1/30/2015	0.0	0.9	12.8	0.3	0
	2/24/2015	0.01	0.6	12.1	0.0	0
	12/28/2012	0.0	1.5	15.8	0.5	0
	1/3/2013	0.0	1.4	10.6	6.7	0
	1/10/2013	0.0	1.3	9.4	11.2	0
	1/17/2013	0.0	1.4	9.0	7.2	0
	2/28/2013	0.0	0.3	2.3	13.8	0
	3/27/2013	0.0	0.1	1.4	18.6	0
	4/25/2013	0.0	0.2	2.9	16.9	0
	5/29/2013	0.0	0.0	0.1	20.8	2
	6/27/2013	0.0	0.2	4.1	15.1	(5)
	7/25/2013	0.0	0.3	4.6	16.1	0
	8/29/2013	0.0	0.5	6.9	14.7	0
	9/25/2013	0.0	2.1	17.0	0.4	7
	11/27/2013	-0.1	2.6	18.0	0.7	0
	12/17/2013	0.0	2.4	17.0	0.9	0
	12/23/2013	-0.05	2.5	14.8	0.7	0
	1/29/2014	0.01	1.5	9.1	6.3	1
	2/25/2014	-0.01	0.1	0.1	22.5	0
	3/27/2014	0.30	0.1	0.0	20.8	0
	4/24/2014	-0.18	0.2	0.2	21.1	0
	4/30/2014	-16.1	0.0	0.9	20.7	nm
	5/1/2014	-0.09	0.1	0.1	20.9	0
	5/2/2014	-0.34	0.0	0.7	20.6	0
	5/3/2014	0.0	0.1	0.9	20.4	0
	5/4/2014	0.0	nm	nm	nm	nm
	5/5/2014	0.0	nm	nm	nm	nm
	5/6/2014	-4.25	nm	nm	nm	nm
	5/7/2014	0.0	nm	nm	nm	nm
	5/8/2014	0.0	nm	nm	nm	nm
	5/9/2014	0.0	nm	nm	nm	nm
	5/12/2014	0.05	nm	nm	nm	nm
	5/13/2014	0.0	nm	nm	nm	nm
	5/14/2014	0.0	nm	nm	nm	nm
	5/15/2014	0.09	nm	nm	nm	nm
	5/16/2014	0.0	nm	nm	nm	nm

**SOIL GAS MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA**

<i>Location</i>	<i>Date</i>	<i>Pressure</i>	<i>Gas Quality/Combustible Gas Concentrations</i>			
		<i>(in H<sub>2</sub>O)</i>	<i>Methane %<sup>1</sup></i>	<i>CO<sub>2</sub> %<sup>1</sup></i>	<i>O<sub>2</sub> %<sup>1</sup></i>	<i>H<sub>2</sub>S ppm</i>
	5/19/2014	0.0	nm	nm	nm	nm
	5/27/2014	0.0	nm	nm	nm	nm
	6/4/2014	-0.04	nm	nm	nm	nm
	6/12/2014	0.0	nm	nm	nm	nm
	6/19/2014	0.02	nm	nm	nm	nm
	6/26/2014	-4.70	nm	nm	nm	nm
	6/30/2014	0.20	nm	nm	nm	nm
	7/1/2014	-0.14	nm	nm	nm	nm
	7/2/2014	-0.14	nm	nm	nm	nm
	7/3/2014	-0.15	nm	nm	nm	nm
	7/7/2014	2.22	nm	nm	nm	nm
	7/17/2014	1.64	nm	nm	nm	nm
	7/24/2014	0.07	0.0	0.0	20.6	0
	7/31/2014	0.0	0.0	4.3	20.1	0
	8/6/2014	-0.25	0.0	0.0	20.6	0
	8/13/2014	-0.02	0.0	0.0	20.8	0
	8/20/2014	-0.20	0.0	0.1	20.2	0
	8/29/2014	-1.00	0.0	0.1	20.4	0
	9/4/2014	-0.30	0.0	0.1	20.7	0
	9/11/2014	-0.52	0.0	0.0	21.7	0
	9/19/2014	-0.19	0.0	4.2	18.9	0
	9/24/2014	0.0	0.0	0.2	21.2	0
	10/1/2014	0.0	0.0	7.8	12.9	0
	10/10/2014	-0.12	0.0	0.1	21.1	0
	10/16/2014	-0.24	0.0	1.6	20.0	0
	10/21/2014	-0.06	0.0	2.4	20.3	0
	10/30/2014	-0.12	0.0	2.8	19.1	0
	11/5/2014	-0.23	0.0	2.2	21.3	0
	11/11/2014	-0.31	0.0	0.1	20.5	0
	11/17/2014	-0.17	0.0	0.0	21.6	0
	11/25/2014	0.0	0.1	0.0	21.5	0
	12/5/2014	-0.10	0.0	0.0	21.0	0
	12/12/2014	0.0	0.0	0.2	20.7	0
	12/19/2014	-0.04	0.0	0.1	22.1	0
	1/30/2015	-0.07	0.0	0.1	21.6	0
	2/24/2015	0.04	0.0	0.1	21.2	0
SGP-118	12/28/2012	0.0	60.0	41.4	1.2	0
	1/3/2013	0.0	61.1	41.5	1.1	0
	1/10/2013	1.9	0.3	0.0	19.7	0
	1/17/2013	0.0	0.2	0.0	21.3	0
	2/28/2013	-1.2	0.0	0.2	21.7	0

**SOIL GAS MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA**

Location	Date	Pressure	Gas Quality/Combustible Gas Concentrations			
		(in H <sub>2</sub> O)	Methane % <sup>1</sup>	CO <sub>2</sub> % <sup>1</sup>	O <sub>2</sub> % <sup>1</sup>	H <sub>2</sub> S ppm
	3/27/2013	0.0	0.0	0.2	21.9	0
	4/25/2013	-1.4	0.0	0.1	20.6	0
	5/29/2013	0.0	46.4	40.0	1.7	0
	6/27/2013	1.4	52.0	47.2	0.2	7
	7/25/2013	0.9	49.5	49.6	0.0	7
	8/29/2013	0.0	48.4	49.1	0.1	2
	9/25/2013	0.0	49.7	48.6	0.1	2
	11/27/2013	0.3	55.3	44.7	0.0	7
	12/17/2013	0.3	59.4	39.3	1.3	5
	12/23/2013	-0.66	41.4	31.4	2.2	0
	1/29/2014	-0.05	12.1	9.4	14.5	0
	2/25/2014	0.55	43.8	30.2	0.0	0
	3/27/2014	0.70	60.4	36.5	0.0	0
	4/24/2014	0.60	56.9	40.5	0.0	2
	6/26/2014	0.85	50.7	49.1	0.2	11
	6/27/2014	0.66	44.6	55.5	0.0	10
	6/30/2014	0.74	44.1	45.2	0.0	9
	7/1/2014	1.12	50.1	49.9	0.2	13
	7/2/2014	0.03	43.2	46.1	0.1	3
	7/3/2014	0.17	35.7	42.9	0.0	0
	7/7/2014	0.15	50.6	49.3	0.0	2
	7/8/2014	0.22	50.1	49.8	0.0	9
	7/9/2014	-0.03	38.5	44.4	0.1	1
	7/10/2014	-0.02	24.9	36.4	0.1	1
	7/11/2014	-0.01	44.8	46.6	0.1	1
	7/17/2014	0.0	48.9	48.1	0.1	2
	9/24/2014	1.00	50.5	46.7	0.1	5
	12/12/2014	0.20	44.3	32.8	0.3	0
	1/30/2015	0.12	12.8	9.8	8.9	0
	2/24/2015	0.30	51.5	30.6	0.0	1
SGP-119S	12/28/2012	0.0	4.8	7.6	15.3	0
	1/3/2013	0.0	4.0	7.2	16.0	0
	1/10/2013	0.0	2.6	6.2	16.0	0
	1/17/2013	0.0	10.4	10.5	14.5	0
	2/28/2013	0.0	6.9	7.7	17.2	0
	3/27/2013	0.0	3.0	5.4	18.8	0
	4/25/2013	0.0	8.0	10.6	14.8	0
	5/29/2013	0.0	0.0	4.2	16.9	0
	6/27/2013	0.0	0.0	6.4	14.1	0
	7/25/2013	0.0	0.0	5.9	15.6	0
	8/29/2013	0.0	0.0	3.7	16.6	0

**SOIL GAS MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA**

<i>Location</i>	<i>Date</i>	<i>Pressure</i>	<i>Gas Quality/Combustible Gas Concentrations</i>			
		<i>(in H<sub>2</sub>O)</i>	<i>Methane %<sup>1</sup></i>	<i>CO<sub>2</sub> %<sup>1</sup></i>	<i>O<sub>2</sub> %<sup>1</sup></i>	<i>H<sub>2</sub>S ppm</i>
	9/25/2013	0.0	0.0	3.8	17.8	0
	11/27/2013	0.0	0.0	3.0	18.2	0
	12/17/2013	0.0	0.0	2.5	15.9	0
	12/23/2013	0.0	0.0	2.2	18.6	0
	1/29/2014	0.02	0.0	2.3	21.0	0
	2/25/2014	0.0	0.0	1.7	19.9	0
	3/27/2014	0.0	0.0	0.5	20.7	0
	4/24/2014	0.0	0.0	1.4	19.2	0
	6/26/2014	0.0	0.0	4.6	15.2	0
	6/30/2014	0.03	0.0	3.9	17.2	0
	7/1/2014	0.0	0.0	3.6	15.4	0
	7/2/2014	0.0	0.0	4.1	16.6	0
	7/3/2014	0.0	0.0	4.3	17.1	0
	9/24/2014	0.0	0.0	2.9	18.5	0
	12/12/2014	0.0	0.0	1.5	19.4	0
	1/30/2015	0.0	0.0	2.6	17.2	0
	2/24/2015	0.03	0.0	2.7	18.7	0
SGP-119D	12/28/2012	0.0	6.8	12.4	11.5	0
	1/3/2013	0.0	5.3	4.4	11.2	0
	1/10/2013	0.0	3.8	11.2	13.0	0
	1/17/2013	0.0	15.6	15.3	10.0	0
	2/28/2013	0.0	7.8	9.2	14.1	0
	3/27/2013	0.0	4.4	8.1	17.0	0
	4/25/2013	0.0	7.4	6.5	13.0	0
	5/29/2013	0.0	0.0	5.2	16.4	0
	6/27/2013	0.0	0.0	7.7	13.2	0
	7/25/2013	0.0	0.0	8.1	14.2	0
	8/29/2013	0.0	0.0	5.1	15.5	0
	9/25/2013	0.0	0.0	5.1	16.6	0
	11/27/2013	0.0	0.0	3.4	17.6	0
	12/17/2013	0.0	0.0	3.2	15.5	0
	12/23/2013	0.0	0.0	2.7	18.4	0
	1/29/2014	0.0	0.0	2.5	20.7	0
	2/25/2014	0.01	0.0	1.9	19.8	0
	3/27/2014	0.0	0.0	0.3	20.7	0
	4/24/2014	0.0	0.0	1.4	19.1	0
	6/26/2014	0.0	0.0	4.5	15.0	0
	6/30/2014	0.0	0.0	4.5	16.6	0
	7/1/2014	0.0	0.0	4.3	15.0	0
	7/2/2014	0.0	0.0	4.5	16.4	0
	7/3/2014	0.0	0.0	4.8	16.7	0

**SOIL GAS MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA**

<i>Location</i>	<i>Date</i>	<i>Pressure</i>	<i>Gas Quality/Combustible Gas Concentrations</i>			
		<i>(in H<sub>2</sub>O)</i>	<i>Methane %<sup>1</sup></i>	<i>CO<sub>2</sub> %<sup>1</sup></i>	<i>O<sub>2</sub> %<sup>1</sup></i>	<i>H<sub>2</sub>S ppm</i>
SGP-13	9/24/2014	0.0	0.0	3.7	17.9	0
	12/12/2014	0.0	0.0	1.9	19.0	0
	1/30/2015	0.0	0.0	2.7	17.0	0
	2/24/2015	0.0	0.0	2.8	18.7	0
	9/24/2012	0.0	0.0	0.7	19.7	0
	9/25/2012	---	---	---	---	---
	9/26/2012	0.0	0.0	0.5	19.8	0
	9/27/2012	0.0	0.0	0.6	19.8	0
	9/28/2012	0.0	0.0	0.5	19.9	0
	10/1/2012	0.0	0.0	0.6	19.8	0
	10/2/2012	0.0	0.0	0.5	19.6	0
	10/3/2012	0.0	0.1	0.8	19.5	0
	10/4/2012	0.0	0.0	0.6	19.6	0
	10/5/2012	0.0	0.0	0.6	20.1	0
	10/12/2012	0.0	0.0	0.5	19.7	0
	10/19/2012	0.0	0.0	0.5	20.9	0
	12/28/2012	0.0	0.0	0.4	20.8	0
	1/3/2013	0.0	0.0	0.0	20.7	0
	1/10/2013	0.0	0.0	0.0	19.9	0
	1/17/2013	0.0	0.0	0.0	20.0	0
	2/28/2013	0.0	0.0	0.4	21.5	0
	3/27/2013	0.0	0.0	0.3	21.9	0
	4/25/2013	0.0	0.0	0.1	20.8	0
	5/29/2013	0.0	0.0	0.2	21.9	0
	6/27/2013	0.0	0.0	1.0	18.6	0
	7/25/2013	0.0	0.0	1.0	19.5	0
	8/29/2013	0.0	0.0	0.8	19.7	0
	9/25/2013	0.0	0.0	0.7	19.7	0
	11/27/2013	0.0	0.0	0.7	20.5	0
	12/17/2013	0.0	0.0	0.5	20.6	0
	12/23/2013	0.0	0.0	0.5	20.9	0
	1/29/2014	0.0	0.0	0.5	19.6	0
	2/25/2014	0.02	0.0	0.9	20.1	0
	3/27/2014	0.0	0.0	0.0	20.5	0
	4/24/2014	0.0	0.0	0.5	20.5	0
	6/26/2014	0.0	0.0	1.6	18.3	0
	6/30/2014	0.08	0.0	1.6	20.1	0
	7/1/2014	0.0	0.0	1.9	18.7	0
	7/2/2014	0.0	0.0	1.8	19.0	0
	7/3/2014	0.0	0.0	1.3	19.4	0
	9/24/2014	0.0	0.0	0.8	18.5	0



TABLE 1

**SOIL GAS MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA**

<i>Location</i>	<i>Date</i>	<i>Pressure (in H<sub>2</sub>O)</i>	<i>Gas Quality/Combustible Gas Concentrations</i>			
			<i>Methane %<sup>1</sup></i>	<i>CO<sub>2</sub> %<sup>1</sup></i>	<i>O<sub>2</sub> %<sup>1</sup></i>	<i>H<sub>2</sub>S ppm</i>
SGP-14	12/12/2014	0.0	0.0	0.4	19.7	0
	1/30/2015	0.0	0.0	0.3	20.6	0
	2/24/2015	0.0	0.0	0.6	18.2	0
	9/24/2012	0.0	0.0	0.6	19.6	0
	9/25/2012	---	---	---	---	---
	9/26/2012	0.0	0.0	0.6	19.8	0
	9/27/2012	0.0	0.0	0.6	19.9	0
	9/28/2012	0.0	0.0	0.6	20.1	0
	10/1/2012	0.0	0.0	0.7	19.9	0
	10/2/2012	0.0	0.0	0.6	19.8	0
	10/3/2012	0.0	0.0	0.6	19.9	0
	10/4/2012	0.0	0.0	0.6	19.5	0
	10/5/2012	0.0	0.0	0.5	20.3	0
	10/12/2012	0.0	0.0	0.7	20.7	0
	10/19/2012	0.0	0.0	0.5	20.4	0
	12/28/2012	0.0	0.0	0.1	20.6	0
	1/3/2013	0.0	0.0	0.4	20.6	0
	1/10/2013	0.0	0.0	0.0	20.5	0
	1/17/2013	0.0	0.0	0.0	20.4	0
	2/28/2013	0.0	0.0	0.5	21.6	0
	3/27/2013	0.0	0.0	0.2	21.9	0
	4/25/2013	0.0	0.0	0.1	20.6	0
	5/29/2013	0.0	0.0	0.2	21.8	0
	6/27/2013	0.0	0.0	0.9	18.7	0
	7/25/2013	0.0	0.0	1.4	19.3	0
	8/29/2013	0.0	0.0	1.2	19.5	0
	9/25/2013	0.0	0.0	0.7	20.1	0
	11/27/2013	0.0	0.0	0.7	20.6	0
	12/17/2013	0.0	0.0	0.6	20.6	0
	12/23/2013	0.0	0.0	0.5	21.2	0
	1/29/2014	0.0	0.0	0.5	19.7	0
	2/25/2014	0.0	0.0	0.7	20.5	0
	3/27/2014	0.0	0.0	0.1	20.7	0
	4/24/2014	0.0	0.0	0.3	20.7	0
	6/26/2014	0.0	0.0	1.6	18.3	0
	6/30/2014	0.08	0.0	1.6	20.0	0
	7/1/2014	0.0	0.0	1.9	18.6	0
	7/2/2014	0.01	0.0	1.8	18.8	0
	7/3/2014	0.0	0.0	2.0	18.7	0
	9/24/2014	0.0	0.0	0.8	18.6	0
	12/12/2014	0.0	0.0	0.4	20.4	0

**SOIL GAS MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA**

<i>Location</i>	<i>Date</i>	<i>Pressure</i>	<i>Gas Quality/Combustible Gas Concentrations</i>			
		<i>(in H<sub>2</sub>O)</i>	<i>Methane %<sup>1</sup></i>	<i>CO<sub>2</sub> %<sup>1</sup></i>	<i>O<sub>2</sub> %<sup>1</sup></i>	<i>H<sub>2</sub>S ppm</i>
SGP-15	1/30/2015	0.0	0.0	0.3	21.6	0
	2/24/2015	0.00	0.0	0.6	20.6	0
	9/24/2012	0.0	0.0	0.3	20.0	0
	9/25/2012	---	---	---	---	---
	9/26/2012	0.0	0.0	0.0	19.9	0
	9/27/2012	0.0	0.0	0.0	20.2	0
	9/28/2012	0.0	0.0	0.6	20.1	0
	10/1/2012	0.0	0.0	0.0	20.2	0
	10/2/2012	0.0	0.0	0.0	20.1	0
	10/3/2012	0.0	0.0	0.0	19.6	0
	10/4/2012	0.0	0.0	0.9	19.2	0
	10/5/2012	0.0	0.0	0.0	19.9	0
	10/12/2012	0.0	0.0	0.0	20.1	0
	10/19/2012	0.0	0.0	0.0	19.8	0
	12/28/2012	0.0	0.0	0.3	20.5	0
	1/3/2013	0.0	0.0	0.3	20.5	0
	1/10/2013	0.0	0.0	0.4	20.4	0
	1/17/2013	0.0	0.0	0.0	20.5	0
	2/28/2013	0.0	0.0	0.2	21.6	0
	3/27/2013	0.0	0.0	0.2	21.8	0
	4/25/2013	0.0	0.0	0.1	20.7	0
	5/29/2013	0.0	0.0	0.2	21.9	0
	6/27/2013	(6)	(6)	(6)	(6)	(6)
	7/25/2013	0.0	0.0	1.7	19.1	0
	8/29/2013	0.0	0.0	1.5	19.3	0
	9/25/2013	0.0	0.0	0.6	20.5	0
	11/27/2013	0.0	0.0	1.5	19.7	0
	12/17/2013	0.0	0.0	1.1	20.2	0
	12/23/2013	0.0	0.0	0.3	20.9	0
	1/29/2014	0.0	0.0	0.2	19.8	0
	2/25/2014	0.0	0.0	0.3	20.7	0
	3/27/2014	0.0	0.0	0.1	20.8	0
	4/24/2014	0.0	0.0	0.4	20.8	0
	6/26/2014	0.0	0.0	1.8	18.4	0
	6/30/2014	0.03	0.0	1.7	19.8	0
	7/1/2014	0.0	0.0	1.9	18.6	0
	7/2/2014	0.0	0.0	1.9	18.9	0
	7/3/2014	0.0	0.0	1.9	18.7	0
	9/24/2014	0.0	0.0	0.9	18.9	0
	12/12/2014	0.0	0.0	0.8	20.7	0
	1/30/2015	0.0	0.0	0.6	22.7	0

TABLE 1

**SOIL GAS MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA**

<i>Location</i>	<i>Date</i>	<i>Pressure</i>	<i>Gas Quality/Combustible Gas Concentrations</i>			
		<i>(in H<sub>2</sub>O)</i>	<i>Methane %<sup>1</sup></i>	<i>CO<sub>2</sub> %<sup>1</sup></i>	<i>O<sub>2</sub> %<sup>1</sup></i>	<i>H<sub>2</sub>S ppm</i>
SGP-16	2/24/2015	0.0	0.0	1.2	20.4	0
	1/17/2013	0.0	0.0	0.0	19.9	0
	2/28/2013	0.0	0.0	0.4	21.3	0
	3/27/2013	0.0	0.0	0.3	21.7	0
	4/25/2013	0.0	0.0	0.1	20.6	0
	5/29/2013	0.0	0.0	0.3	21.8	0
	6/27/2013	(6)	(6)	(6)	(6)	(6)
	7/25/2013	(6)	(6)	(6)	(6)	(6)
	8/29/2013	(6)	(6)	(6)	(6)	(6)
	9/25/2013	0.0	0.0	1.1	20.1	0
	11/27/2013	0.0	0.0	0.9	20.2	0
	12/17/2013	0.0	0.0	0.8	20.3	0
	12/23/2013	0.0	0.0	0.8	21.5	0
	1/29/2014	0.0	0.0	0.7	19.3	0
	2/25/2014	0.0	0.0	1.1	20.1	0
	3/27/2014	0.0	0.0	0.0	20.9	0
	4/24/2014	0.0	0.0	0.6	20.6	0
	6/26/2014	0.0	0.0	0.0	20.4	0
	6/30/2014	0.03	0.0	2.2	19.1	0
	7/1/2014	0.0	0.0	2.6	17.7	0
	7/2/2014	0.01	0.0	2.5	18.2	0
	7/3/2014	0.0	0.0	2.5	18.2	0
	9/24/2014	0.0	0.0	0.7	18.7	0
	12/12/2014	0.0	0.0	0.6	21.0	0
	1/30/2015	0.0	0.0	0.7	23.4	0
	2/24/2015	0.0	0.0	1.0	20.3	0
SGP-27S	9/24/2012	0.0	0.0	0.7	19.7	0
	9/25/2012	---	---	---	---	---
	9/26/2012	0.0	0.0	0.0	20.1	0
	9/27/2012	0.0	0.0	0.7	19.8	0
	9/28/2012	0.0	0.0	0.6	19.6	0
	10/1/2012	0.0	0.0	0.6	20.1	0
	10/2/2012	0.0	0.0	0.6	19.9	0
	10/3/2012	0.0	0.0	0.8	19.8	0
	10/4/2012	0.0	0.0	0.8	19.2	0
	10/5/2012	0.0	0.0	1.0	19.6	0
	10/12/2012	0.0	0.0	0.7	20.0	0
	10/19/2012	0.0	0.0	0.8	19.9	0
	12/28/2012	0.0	0.0	0.2	21.1	0
	1/3/2013	(4)	(4)	(4)	(4)	(4)

**SOIL GAS MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA**

<i>Location</i>	<i>Date</i>	<i>Pressure</i>	<i>Gas Quality/Combustible Gas Concentrations</i>			
		<i>(in H<sub>2</sub>O)</i>	<i>Methane %<sup>1</sup></i>	<i>CO<sub>2</sub> %<sup>1</sup></i>	<i>O<sub>2</sub> %<sup>1</sup></i>	<i>H<sub>2</sub>S ppm</i>
	1/10/2013	0.0	0.2	0.0	20.0	0
	1/17/2013	0.0	0.0	0.0	20.3	0
	2/28/2013	0.0	0.0	0.2	21.7	0
	3/27/2013	0.0	0.0	0.2	21.8	0
	4/25/2013	0.0	0.0	0.1	20.4	0
	5/29/2013	0.0	0.0	0.7	20.3	0
	6/27/2013	0.0	0.0	0.7	18.8	0
	7/25/2013	0.0	0.0	1.2	19.6	0
	8/29/2013	0.0	0.0	1.0	19.7	0
	9/25/2013	0.0	0.0	0.3	20.3	0
	11/27/2013	0.0	0.0	0.2	20.7	0
	12/17/2013	0.0	0.0	0.1	20.4	0
	12/23/2013	0.0	0.0	0.1	21.6	0
	1/29/2014	0.0	0.0	0.7	19.7	0
	2/25/2014	0.0	0.0	0.9	20.8	0
	3/27/2014	0.0	0.0	0.3	20.9	0
	4/24/2014	0.0	0.0	0.6	20.6	0
	4/30/2014	0.0	0.0	0.9	20.1	nm
	5/1/2014	0.0	0.0	0.9	21.0	0
	5/2/2014	-0.01	0.0	0.7	20.6	0
	5/3/2014	0.0	0.1	0.7	20.5	0
	5/4/2014	0.0	0.0	0.6	20.1	0
	5/5/2014	0.0	0.0	0.6	19.9	0
	5/6/2014	0.0	0.0	0.7	20.5	0
	5/7/2014	0.0	0.0	0.6	20.1	0
	5/8/2014	0.0	0.0	0.5	19.8	0
	5/9/2014	0.0	0.0	0.5	20.0	0
	5/12/2014	0.0	0.0	0.0	20.5	0
	5/13/2014	0.0	0.0	0.8	20.0	0
	5/14/2014	0.0	0.0	0.8	20.0	0
	5/15/2014	0.30	0.0	0.9	20.4	nm
	5/16/2014	0.0	0.0	0.9	20.0	nm
	5/19/2014	0.0	0.0	0.9	19.8	0
	5/27/2014	0.0	0.0	1.0	20.7	0
	6/4/2014	0.0	0.0	1.2	20.2	0
	6/12/2014	0.01	0.0	1.0	19.7	0
	6/19/2014	0.0	0.0	1.0	19.1	0
	6/26/2014	0.0	0.0	1.3	18.1	0
	6/30/2014	0.08	0.0	1.3	19.4	0
	7/1/2014	0.0	0.0	1.7	18.8	0
	7/2/2014	0.0	0.0	1.5	19.8	0
	7/3/2014	0.0	0.0	1.6	19.3	0

**SOIL GAS MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA**

<i>Location</i>	<i>Date</i>	<i>Pressure (in H<sub>2</sub>O)</i>	<i>Gas Quality/Combustible Gas Concentrations</i>			
			<i>Methane %<sup>1</sup></i>	<i>CO<sub>2</sub> %<sup>1</sup></i>	<i>O<sub>2</sub> %<sup>1</sup></i>	<i>H<sub>2</sub>S ppm</i>
SGP-27D	7/7/2014	0.0	0.0	1.5	19.4	0
	7/18/2014	0.0	0.0	1.1	19.6	0
	7/24/2014	0.0	0.0	0.4	20.1	0
	7/31/2014	0.0	0.0	1.1	19.9	0
	9/24/2014	0.0	0.0	0.5	19.1	0
	12/12/2014	0.0	0.0	0.6	21.7	0
	1/30/2015	0.0	0.0	0.8	20.8	0
	2/24/2015	0.0	0.0	1.3	19.7	0.0
	9/24/2012	0.0	0.0	0.7	19.8	0
	9/25/2012	---	---	---	---	---
	9/26/2012	0.0	0.0	0.9	19.5	0
	9/27/2012	0.0	0.0	0.9	19.7	0
	9/28/2012	0.0	0.0	0.8	19.4	0
	10/1/2012	0.0	0.0	0.9	19.6	0
	10/2/2012	0.0	0.0	0.8	19.7	0
	10/3/2012	0.0	0.0	0.9	19.7	0
	10/4/2012	0.0	0.0	1.1	18.8	0
	10/5/2012	0.0	0.0	1.0	19.8	0
	10/12/2012	0.0	0.0	0.9	19.8	0
	10/19/2012	0.0	0.0	1.0	19.8	0
	12/28/2012	0.0	0.0	0.2	21.0	0
	1/3/2013	0.0	0.0	0.5	20.4	0
	1/10/2013	0.0	0.0	0.2	19.6	0
	1/17/2013	0.0	0.2	0.0	20.3	0
	2/28/2013	0.0	0.0	0.3	21.7	0
	3/27/2013	0.0	0.0	0.6	21.5	0
	4/25/2013	0.0	0.0	0.7	20.0	0
	5/29/2013	0.0	0.0	0.1	21.0	0
	6/27/2013	0.0	0.0	0.8	18.9	0
	7/25/2013	0.0	0.0	1.5	19.2	0
	8/29/2013	0.0	0.0	0.8	19.1	0
	9/25/2013	0.0	0.0	0.9	20.1	0
	11/27/2013	0.0	0.0	1.0	20.1	0
	12/17/2013	0.0	0.0	0.8	20.0	0
	12/23/2013	0.1	0.0	0.7	21.1	0
	1/29/2014	0.0	0.0	0.7	20.3	0
	2/25/2014	0.01	0.0	0.9	20.9	0
	3/27/2014	0.0	0.0	0.4	20.8	0
	4/24/2014	0.0	0.0	0.5	20.7	0
	4/30/2014	0.0	0.0	0.9	20.3	nm
	5/1/2014	0.0	0.0	0.9	21.0	0

**SOIL GAS MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA**

<i>Location</i>	<i>Date</i>	<i>Pressure</i>	<i>Gas Quality/Combustible Gas Concentrations</i>			
		<i>(in H<sub>2</sub>O)</i>	<i>Methane %<sup>1</sup></i>	<i>CO<sub>2</sub> %<sup>1</sup></i>	<i>O<sub>2</sub> %<sup>1</sup></i>	<i>H<sub>2</sub>S ppm</i>
	5/2/2014	-0.01	0.0	0.7	20.8	0
	5/3/2014	0.0	0.1	0.8	20.5	0
	5/4/2014	0.0	0.0	0.7	20.0	0
	5/5/2014	0.0	0.0	0.7	19.8	0
	5/6/2014	0.0	0.0	0.7	20.5	0
	5/7/2014	0.0	0.0	0.7	19.9	0
	5/8/2014	0.0	0.0	0.4	19.9	0
	5/9/2014	0.0	0.0	0.6	19.9	0
	5/12/2014	0.0	0.0	0.6	20.7	0
	5/13/2014	0.0	0.0	0.7	20.2	0
	5/14/2014	0.0	0.0	0.7	20.2	0
	5/15/2014	0.32	0.0	0.8	20.4	nm
	5/16/2014	0.0	0.0	0.8	20.3	nm
	5/19/2014	0.0	0.0	0.9	19.8	0
	5/27/2014	0.0	0.0	1.0	19.6	0
	6/4/2014	0.0	0.0	1.3	20.1	0
	6/12/2014	0.01	0.0	1.1	19.9	0
	6/19/2014	0.0	0.0	1.1	19.2	0
	6/26/2014	0.0	0.0	1.1	18.3	0
	6/30/2014	0.08	0.0	1.3	19.4	0
	7/1/2014	0.0	0.0	1.7	18.8	0
	7/2/2014	0.0	0.0	1.5	19.6	0
	7/3/2014	0.0	0.0	1.6	19.3	0
	7/7/2014	0.0	0.0	1.6	19.3	0
	7/18/2014	0.0	0.0	1.2	19.6	0
	7/24/2014	0.0	0.0	0.5	20.0	0
	7/31/2014	0.0	0.0	1.2	19.8	0
	9/24/2014	0.0	0.0	0.7	18.8	0
	12/12/2014	0.0	0.0	0.6	21.9	0
	1/30/2015	0.0	0.0	1.3	19.2	0
	2/24/2015	0.0	0.0	1.2	19.8	0.0

## Notes:

1- Percent by volume

2- Valve opened for 30 minutes and closed prior to reading

3- Valves at SGP107, SGP110 and SGP114 were left open overnight on October 1, 2012

4- Broken valve; no monitoring at this location on this date

5- There was a pump error at the time of measurement

6- Soil gas probes were not accessible during the monitoring event

nm- not monitored or not monitored due to presence of water in vacuum tube leading to instrument pump shut off



Event	Location	Velocity (ft/min)			Gas Quality/Combustible Gas Concentration		
		Front	Middle	Back	Methane % <sup>1</sup>	CO2 % <sup>1</sup>	O2 % <sup>1</sup>
3Q12	PVT 1	76	55	54	0.0	0.5	20.3
4Q12		52	22	82	0.0	0.0	20.2
1Q13		118	122	116	0.0	0.3	21.8
2Q13		67	71	80	0.0	0.8	19.5
3Q13		62	90	41	0.0	0.6	20.8
4Q13		28	25	36	0.0	0.2	20.5
1Q14		28	17	83	0.0	0.1	20.9
2Q14		16	6	5	0.0	1.7	18.6
3Q14		44	75	70	0.0	0.4	20.6
3Q14		47	43	46	0.0	0.0	20.8
3Q14		28	27	26	0.0	0.7	19.6
4Q14		50	100	37	0.0	0.6	10.9
Monthly		100	125	65	0.0	0.1	18.6
Monthly		(4)	(4)	(4)	(4)	(4)	(4)
3Q12	PVT 2	54	54	53	0.0	0.1	20.6
4Q12		72	69	62	0.0	0.0	20.4
1Q13		133	150	146	0.0	0.2	22.1
2Q13		40	37	41	0.0	0.6	19.3
3Q13		20	38	42	0.0	0.1	21.0
4Q13		50	68	65	0.0	0.1	19.3
1Q14		78	98	111	0.0	0.2	20.7
2Q14		2	2	2	0.0	1.7	18.8
3Q14		40	64	70	0.0	0.5	20.4
3Q14		92	158	61	0.0	0.5	20.4
3Q14		-	-	-	-	-	-
3Q14		25	20	13	0.0	1.3	18.9
3Q14		43	96	70	0.0	0.7	20
3Q14		31	21	28	0.0	0.4	20.9
3Q14		81	82	40	0.0	1.0	19.9
3Q14		20	28	29	0.0	0.2	20.1
3Q14		57	53	102	0.0	0.0	19.5
3Q14		35	26	28	0.0	0.7	19.9
4Q14		77	120	57	0.0	0.2	21.4
Monthly		(4)	(4)	(4)	(4)	(4)	(4)
Monthly		(4)	(4)	(4)	(4)	(4)	(4)
3Q12	PVT 3	70	83	89	0.0	0.0	20.4
4Q12		77	69	39	0.0	0.0	20.6
1Q13		256	250	280	0.0	0.2	22.1
2Q13		32	38	40	0.0	0.3	19.7
3Q13		51	72	69	0.0	0.2	20.7
4Q13		53	47	15	0.0	0.1	21.8
1Q14		85	84	130	0.0	0.0	20.9
2Q14		4	3	3	0.0	1.6	18.1
3Q14		55	48	60	0.0	0.2	20.3
3Q14		110	190	131	0.0	0.2	20.6
3Q14		32	30	32	0.0	0.3	19.9
4Q14		56	55	68	0.0	0.1	21.6
Monthly		97	70	112	0.0	0.1	16.9

TABLE 2

PASSIVE VENTILATION TRENCH MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA

Date	Event	Location	Velocity (ft/min)			Gas Quality/Combustible Gas Concentrations			
			Front	Middle	Back	Methane % <sup>1</sup>	CO2 % <sup>1</sup>	O2 % <sup>1</sup>	H2S PPM <sup>2</sup>
9/21/2012	3Q12	PVT 1	76	55	54	0.0	0.5	20.3	0.0
12/28/2012	4Q12		52	22	82	0.0	0.0	20.2	0.0
3/27/2013	1Q13		118	122	116	0.0	0.3	21.8	0.0
6/27/2013	2Q13		67	71	80	0.0	0.8	19.5	0.0
9/25/2013	3Q13		62	90	41	0.0	0.6	20.8	0.0
12/23/2013	4Q13		28	25	36	0.0	0.2	20.5	0.0
3/27/2014	1Q14		28	17	83	0.0	0.1	20.9	0.0
6/26/2014	2Q14		16	6	5	0.0	1.7	18.6	0.0
7/1/2014	3Q14		44	75	70	0.0	0.4	20.6	0.0
7/8/2014	3Q14		47	43	46	0.0	0.0	20.8	0.0
9/24/2014	3Q14		28	27	26	0.0	0.7	19.6	0.0
12/12/2014	4Q14		50	100	37	0.0	0.6	10.9	0.0
1/30/2015	Monthly		100	125	65	0.0	0.1	18.6	0.0
2/24/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)
9/21/2012	3Q12	PVT 2	54	54	53	0.0	0.1	20.6	0.0
12/28/2012	4Q12		72	69	62	0.0	0.0	20.4	0.0
3/27/2013	1Q13		133	150	146	0.0	0.2	22.1	0.0
6/27/2013	2Q13		40	37	41	0.0	0.6	19.3	0.0
9/25/2013	3Q13		20	38	42	0.0	0.1	21.0	0.0
12/23/2013	4Q13		50	68	65	0.0	0.1	19.3	0.0
3/27/2014	1Q14		78	98	111	0.0	0.2	20.7	0.0
6/26/2014	2Q14		2	2	2	0.0	1.7	18.8	0.0
7/1/2014	3Q14		40	64	70	0.0	0.5	20.4	0.0
7/8/2014	3Q14		92	158	61	0.0	0.5	20.4	0.0
7/31/2014	3Q14		-	-	-	-	-	-	-
8/6/2014	3Q14		25	20	13	0.0	1.3	18.9	0.0
8/13/2014	3Q14		43	96	70	0.0	0.7	20	0.0
8/20/2014	3Q14		31	21	28	0.0	0.4	20.9	0.0
8/29/2014	3Q14		81	82	40	0.0	1.0	19.9	0.0
9/4/2014	3Q14		20	28	29	0.0	0.2	20.1	0.0
9/11/2014	3Q14		57	53	102	0.0	0.0	19.5	0.0
9/24/2014	3Q14		35	26	28	0.0	0.7	19.9	0.0
12/12/2014	4Q14		77	120	57	0.0	0.2	21.4	0.0
1/30/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)
2/24/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)
9/21/2012	3Q12	PVT 3	70	83	89	0.0	0.0	20.4	0.0
12/28/2012	4Q12		77	69	39	0.0	0.0	20.6	0.0
3/27/2013	1Q13		256	250	280	0.0	0.2	22.1	0.0
6/27/2013	2Q13		32	38	40	0.0	0.3	19.7	0.0
9/25/2013	3Q13		51	72	69	0.0	0.2	20.7	0.0
12/23/2013	4Q13		53	47	15	0.0	0.1	21.8	0.0
3/27/2014	1Q14		85	84	130	0.0	0.0	20.9	0.0
6/26/2014	2Q14		4	3	3	0.0	1.6	18.1	0.0
7/1/2014	3Q14		55	48	60	0.0	0.2	20.3	0.0
7/8/2014	3Q14		110	190	131	0.0	0.2	20.6	0.0
9/24/2014	3Q14		32	30	32	0.0	0.3	19.9	0.0
12/12/2014	4Q14		56	55	68	0.0	0.1	21.6	0.0
1/30/2015	Monthly		92	70	48	0.0	0.1	16.9	0.0
2/24/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)
9/21/2012	3Q12	PVT 4	82	91	93	0.0	0.1	20.6	0.0
12/28/2012	4Q12		90	116	29	0.0	0.0	20.7	0.0

TABLE 2

PASSIVE VENTILATION TRENCH MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA

Date	Event	Location	Velocity (ft/min)			Gas Quality/Combustible Gas Concentrations			
			Front	Middle	Back	Methane % <sup>1</sup>	CO2 % <sup>1</sup>	O2 % <sup>1</sup>	H2S PPM <sup>2</sup>
3/27/2013	1Q13		156	144	136	0.0	0.2	22.0	0.0
6/27/2013	2Q13		53	58	55	0.0	0.0	20.1	0.0
9/25/2013	3Q13		10	32	27	0.0	0.1	20.5	0.0
12/23/2013	4Q13		110	130	108	0.0	0.1	22.1	0.0
3/27/2014	1Q14		93	240	169	0.0	0.1	20.6	0.0
6/26/2014	2Q14		3	2	1	0.0	3.1	16.0	0.0
7/1/2014	3Q14		25	32	44	0.0	0.0	20.3	0.0
7/8/2014	3Q14		53	67	61	0.0	0.1	20.7	0.0
9/24/2014	3Q14		19	30	22	0.0	0.1	19.7	0.0
12/12/2014	4Q14		33	44	51	0.0	0.1	21.5	0.0
1/30/2015	Monthly		154	196	163	0.0	0.1	17.4	0.0
2/24/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)
9/21/2012	3Q12	PVT 5	78	77	75	0.0	0.6	20.0	0.0
12/28/2012	4Q12		63	63	64	0.0	0.0	20.9	0.0
3/27/2013	1Q13		163	182	179	0.0	0.2	22.0	0.0
6/27/2013	2Q13		22	18	20	0.0	0.4	19.5	0.0
9/25/2013	3Q13		65	89	54	0.0	0.3	20.3	0.0
12/23/2013	4Q13		69	40	49	0.0	0.2	22.5	0.0
3/27/2014	1Q14		58	110	129	0.0	0.0	20.9	0.0
6/26/2014	2Q14		35	20	26	0.0	1.3	18.5	0.0
7/1/2014	3Q14		30	50	120	0.0	0.1	19.8	0.0
7/8/2014	3Q14		90	102	64	0.0	0.0	20.7	0.0
9/24/2014	3Q14		29	51	41	0.0	0.1	20.0	0.0
12/12/2014	4Q14		31	40	84	0.0	0.1	21.6	0.0
1/30/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)
2/24/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)
9/21/2012	3Q12	PVT 6	75	71	71	0.0	0.5	20.3	0.0
12/28/2012	4Q12		45	43	32	0.1	0.1	21.0	0.0
3/27/2013	1Q13		142	156	163	0.0	0.2	22.1	0.0
6/27/2013	2Q13		--	--	--	--	--	--	--
9/25/2013	3Q13		29	29	8	0.0	0.1	20.5	0.0
12/23/2013	4Q13		--	--	--	--	--	--	--
3/27/2014	1Q14		66	74	106	0.0	0.0	20.4	0.0
6/26/2014	2Q14		--	--	--	0.0	4.7	13.2	0.0
7/1/2014	3Q14		--	--	--	--	--	--	--
7/8/2014	3Q14		59	117	52	0.0	0.3	20.3	0.0
9/24/2014	3Q14		32	15	19	0.0	0.2	19.8	0.0
12/12/2014	4Q14		20	63	60	0.0	0.1	21.5	0.0
1/30/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)
2/24/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)
9/21/2012	3Q12	PVT 7	57	57	56	0.0	1.2	19.7	0.0
12/28/2012	4Q12		126	80	35	0.1	0.1	21.1	0.0
3/27/2013	1Q13		124	118	132	0.0	0.2	22.1	0.0
6/27/2013	2Q13		60	67	75	0.0	8.0	10.8	0.0
9/25/2013	3Q13		30	31	10	0.0	1.8	19.0	0.0
12/23/2013	4Q13		--	--	--	--	--	--	--
3/27/2014	1Q14		92	158	238	0.0	0.0	21.1	0.0
6/26/2014	2Q14		11	10	7	0.0	0.8	19.2	0.0
7/1/2014	3Q14		60	50	65	0.0	0.8	18.9	0.0
7/8/2014	3Q14		113	129	121	0.0	0.4	20.1	0.0
9/24/2014	3Q14		48	44	34	0.0	2.5	17.6	0.0

TABLE 2

PASSIVE VENTILATION TRENCH MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA

Date	Event	Location	Velocity (ft/min)			Gas Quality/Combustible Gas Concentrations			
			Front	Middle	Back	Methane % <sup>1</sup>	CO2 % <sup>1</sup>	O2 % <sup>1</sup>	H2S PPM <sup>2</sup>
12/12/2014	4Q14		77	60	50	0.0	0.1	21.3	0.0
1/30/2015	Monthly		117	170	160	0.0	0.2	17.5	0.0
2/24/2015	Monthly		28	30	217	0.0	0.5	19.8	0.0
9/21/2012	3Q12	PVT 8	42	42	43	0.0	0.3	20.1	0.0
12/28/2012	4Q12		99	102	43	0.0	0.1	21.3	0.0
3/27/2013	1Q13		75	89	90	0.0	0.2	22.1	0.0
6/27/2013	2Q13		60	54	45	0.0	0.5	19.1	0.0
9/25/2013	3Q13		63	72	64	0.0	0.1	19.4	0.0
12/23/2013	4Q13		30	37	31	0.0	1.8	20.9	0.0
3/27/2014	1Q14		150	172	282	0.0	0.0	21.0	0.0
6/26/2014	2Q14		21	9	21	0.0	0.8	19.0	0.0
7/1/2014	3Q14		18	28	24	0.0	6.6	11.8	0.0
7/8/2014	3Q14		68	115	151	0.0	4.8	14.1	0.0
9/24/2014	3Q14		24	20	15	0.0	4.2	16.1	0.0
12/12/2014	4Q14		97	91	62	0.0	0.7	20.7	0.0
1/30/2015	Monthly		50	71	34	0.0	0.3	16.9	0.0
2/24/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)
9/21/2012	3Q12	PVT 9	46	46	48	0.0	1.8	19.0	0.0
12/28/2012	4Q12		90	47	65	0.0	0.4	20.8	0.0
3/27/2013	1Q13		58	73	85	0.0	0.1	22.1	0.0
6/27/2013	2Q13		124	126	131	0.0	4.7	14.4	0.0
9/25/2013	3Q13		29	31	21	0.0	1.1	19.9	0.0
12/23/2013	4Q13		126	42	47	0.0	0.2	21.0	0.0
3/27/2014	1Q14		38	109	119	0.0	0.0	20.9	0.0
6/26/2014	2Q14		13	10	7	1.4	11.2	6.5	0.0
7/1/2014	3Q14		40	43	5	0.3	12.2	6.0	0.0
7/8/2014	3Q14		46	71	154	0.1	3.7	15.7	0.0
9/24/2014	3Q14		31	44	22	0.0	1.8	18.5	0.0
12/12/2014	4Q14		55	61	50	0.0	0.1	21.4	0.0
1/30/2015	Monthly		99	74	93	0.0	0.2	18.5	0.0
2/24/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)
9/21/2012	3Q12	PVT 10	64	64	64	0.0	2.3	18.7	0.0
12/28/2012	4Q12		38	65	53	0.2	0.6	20.9	0.0
3/27/2013	1Q13		221	242	256	0.1	0.8	21.3	0.0
6/27/2013	2Q13		27	31	26	0.0	11.7	6.9	0.0
9/25/2013	3Q13		6	8	6	0.0	4.0	17.2	0.0
12/23/2013	4Q13		57	45	43	0.0	1.6	19.5	0.0
3/27/2014	1Q14		52	36	42	0.3	1.7	18.0	0.0
6/26/2014	2Q14		9	8	8	0.0	0.4	20.2	0.0
7/1/2014	3Q14		27	34	38	0.8	13.0	5.1	0.0
7/8/2014	3Q14		42	58	79	0.0	11.9	6.2	0.0
9/24/2014	3Q14		44	59	32	0.0	4.4	15.8	0.0
12/12/2014	4Q14		52	53	100	0.0	0.6	20.9	0.0
1/30/2015	Monthly		84	54	72	0.0	0.4	20.2	0.0
2/24/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)
11/27/2013	Monthly	PVT 11	--	92	--	0.0	0.9	22.0	0.0
12/17/2013	Monthly		40	91	44	0.0	0.8	19.2	0.0

TABLE 2

PASSIVE VENTILATION TRENCH MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA

Date	Event	Location	Velocity (ft/min)			Gas Quality/Combustible Gas Concentrations			
			Front	Middle	Back	Methane % <sup>1</sup>	CO2 % <sup>1</sup>	O2 % <sup>1</sup>	H2S PPM <sup>2</sup>
12/23/2013	Monthly		164	187	208	0.0	0.7	20.5	0.0
1/29/2014	Monthly		85	56	73	0.0	0.8	20.3	0.0
2/25/2014	Monthly		10	10	7	0.0	0.9	19.2	0.0
3/27/2014	Monthly		58	72	171	0.0	0.2	21.0	0.0
4/24/2014	Monthly		55	40	128	0.0	0.0	20.8	0.0
6/26/2014	2Q14		4	8	3	0.0	0.0	20.7	0.0
7/1/2014	3Q14		36	64	84	0.0	0.0	19.5	0.0
7/8/2014	3Q14		52	44	30	0.0	0.0	20.5	0.0
7/18/2014	3Q14		49	41	35	0.0	0.0	21.0	0.0
7/24/2014	3Q14		56	37	27	0.0	3.5	17.4	0.0
7/31/2014	3Q14		8	13	45	0.0	0.1	20.3	0.0
8/6/2014	3Q14		23	14	19	0.0	0.0	20.2	0.0
8/13/2014	3Q14		47	36	46	0.0	2.4	18.8	0.0
8/20/2014	3Q14		5	24	11	0.0	1.5	19.6	0.0
8/29/2014	3Q14		18	6	28	0.0	1.6	19.7	0.0
9/4/2014	3Q14		9	25	34	0.0	0.6	19.9	0.0
9/11/2014	3Q14		35	59	36	0.0	0.0	21.2	0.0
9/19/2014	3Q14		38	25	21	0.0	1.8	18.7	0.0
9/24/2014	3Q14		41	33	26	0.0	3.1	16.5	0.0
12/12/2014	4Q14		153	131	190	0.0	0.1	21.3	0.0
1/30/2015	Monthly		110	132	90	0.0	0.5	18.5	0.0
2/24/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)
11/27/2013	Monthly	PVT 12	--	28	--	0.0	0.2	20.9	0.0
12/17/2013	Monthly		70	98	68	0.0	0.1	19.7	0.0
12/23/2013	Monthly		106	82	61	0.0	0.4	20.8	0.0
1/29/2014	Monthly		70	45	88	0.0	0.3	21.0	0.0
2/25/2014	Monthly		90	134	50	0.0	1.1	20.1	0.0
3/27/2014	Monthly		35	70	160	0.0	0.1	21.2	0.0
4/24/2014	Monthly		115	212	424	0.0	0.2	20.3	0.0
6/26/2014	2Q14		29	27	22	0.0	0.0	20.5	0.0
7/1/2014	3Q14		50	74	94	0.0	0.0	19.0	0.0
7/8/2014	3Q14		70	49	56	0.0	0.0	20.5	0.0
7/18/2014	3Q14		46	53	54	0.0	4.2	15.9	0.0
7/24/2014	3Q14		57	30	55	0.0	3.2	17.4	0.0
7/31/2014	3Q14		30	70	50	0.0	0.9	19.5	0.0
8/6/2014	3Q14		2	3	3	0.0	1.2	18.2	0.0
9/24/2014	3Q14		25	21	11	0.0	5.3	14.8	0.0
12/12/2014	4Q14		38	35	60	0.0	0.4	21.6	0.0
1/30/2015	Monthly		114	160	84	0.0	0.5	18.9	0.0
2/24/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)
11/27/2013	Monthly	PVT 13	--	38	--	0.0	0.6	20.7	0.0
12/17/2013	Monthly		35	60	67	0.0	0.2	19.2	0.0
12/23/2013	Monthly		99	55	65	0.0	0.3	20.7	0.0

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PASSIVE VENTILATION TRENCH MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA

Date	Event	Location	Velocity (ft/min)			Gas Quality/Combustible Gas Concentrations			
			Front	Middle	Back	Methane % <sup>1</sup>	CO2 % <sup>1</sup>	O2 % <sup>1</sup>	H2S PPM <sup>2</sup>
1/29/2014	Monthly		80	100	91	0.0	0.4	21.5	0.0
2/25/2014	Monthly		65	76	68	0.0	0.5	21.0	0.0
3/27/2014	Monthly		47	81	183	0.0	0.2	21.1	0.0
4/24/2014	Monthly		56	117	207	0.0	0.0	20.9	0.0
6/26/2014	2Q14		7	6	6	0.5	0.7	19.6	0.0
7/1/2014	3Q14		13	28	38	0.0	0.7	18.4	0.0
7/8/2014	3Q14		89	113	128	0.1	0.4	20.2	0.0
7/18/2014	3Q14		54	81	41	0.0	1.3	19.5	0.0
7/24/2014	3Q14		5	7	4	0.0	1.9	19.0	0.0
7/31/2014	3Q14		70	36	15	0.0	2.6	18.2	0.0
8/6/2014	3Q14		33	21	40	0.0	0.9	18.7	0.0
8/13/2014	3Q14		28	41	48	0.1	4.6	15.1	0.0
8/20/2014	3Q14		61	31	20	0.0	1.1	19.8	0.0
8/29/2014	3Q14		86	43	34	0.0	5.5	14.7	0.0
9/4/2014	3Q14		6	0	3	0.0	0.4	19.7	0.0
9/11/2014	3Q14		25	79	34	0.0	0.0	21.2	0.0
9/24/2014	3Q14		27	37	31	0.0	3.2	17.0	0.0
12/12/2014	4Q14		65	29	30	0.0	0.3	21.8	0.0
1/30/2015	Monthly		60	72	34	0.0	0.2	19.7	0.0
2/24/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)
11/27/2013	Monthly	PVT 14	--	91	--	0.0	0.4	22.5	0.0
12/17/2013	Monthly		40	70	88	0.0	0.5	18.5	0.0
12/23/2013	Monthly		103	74	50	0.0	0.2	20.9	0.0
1/29/2014	Monthly		30	32	37	0.0	0.2	22.7	0.0
2/25/2014	Monthly		41	94	61	0.0	0.2	21.2	0.0
3/27/2014	Monthly		40	75	208	0.0	0.1	21.0	0.0
4/24/2014	Monthly		101	108	210	0.0	0.0	21.2	0.0
6/26/2014	2Q14		32	24	62	0.0	0.0	20.1	0.0
7/1/2014	3Q14		24	28	57	0.0	0.5	18.1	0.0
7/8/2014	3Q14		61	117	178	0.1	0.8	19.9	0.0
7/18/2014	3Q14		40	73	45	0.0	0.7	19.8	0.0
7/24/2014	3Q14		60	70	27	0.0	0.2	20.7	0.0
7/31/2014	3Q14		28	2	40	0.0	2.8	17.9	0.0
8/6/2014	3Q14		42	344	43	0.0	0.1	19.9	0.0
9/24/2014	3Q14		10	11	9	0.0	2.7	17.6	0.0
12/12/2014	4Q14		28	90	61	0.0	0.1	21.9	0.0
1/30/2015	Monthly		48	16	24	0.0	0.1	20.2	0.0
2/24/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)
11/27/2013	Monthly	PVT 15	--	91	--	0.0	0.2	21.4	0.0
12/17/2013	Monthly		33	39	70	0.0	0.2	18.6	0.0
12/23/2013	Monthly		149	90	111	0.0	0.1	21.6	0.0
1/29/2014	Monthly		--	--	--	--	--	--	--
2/25/2014	Monthly		--	--	--	0.0	0.1	21.3	0.0



TABLE 2

PASSIVE VENTILATION TRENCH MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA

Date	Event	Location	Velocity (ft/min)			Gas Quality/Combustible Gas Concentrations			
			Front	Middle	Back	Methane % <sup>1</sup>	CO2 % <sup>1</sup>	O2 % <sup>1</sup>	H2S PPM <sup>2</sup>
3/27/2014	Monthly		--	--	--	0.0	0.0	21.2	0.0
4/24/2014	Monthly		103	140	230	0.0	0.0	21.3	0.0
6/26/2014	2Q14		22	19	31	0.0	0.0	19.9	0.0
7/1/2014	3Q14		44	50	57	0.0	0.1	18.6	0.0
7/8/2014	3Q14		69	95	114	0.0	0.0	20.8	0.0
7/18/2014	3Q14		25	56	40	0.0	0.0	20.7	0.0
7/24/2014	3Q14		51	34	36	0.0	0.1	20.7	0.0
7/31/2014	3Q14		22	27	30	0.0	1.4	19.5	0.0
8/6/2014	3Q14		54	60	45	0.0	0.0	20.2	0.0
9/24/2014	3Q14		27	28	26	0.0	0.2	20.6	0.0
12/12/2014	4Q14		52	125	30	0.0	0.2	21.1	0.0
1/30/2015	Monthly		52	98	55	0.0	0.1	20.1	0.0
2/24/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)
11/27/2013	Monthly	PVT 16	--	63	--	0.0	0.3	21.1	0.0
12/17/2013	Monthly		160	156	81	0.0	0.2	17.9	0.0
12/23/2013	Monthly		60	56	30	0.0	0.1	21.9	0.0
1/29/2014	Monthly		44	25	52	0.0	0.2	23.2	0.0
2/25/2014	Monthly		54	56	76	0.0	0.1	21.5	0.0
3/27/2014	Monthly		39	55	210	0.0	0.0	21.3	0.0
4/24/2014	Monthly		114	117	200	0.0	0.0	21.1	0.0
6/26/2014	2Q14		2	1	1	0.0	0.1	19.7	0.0
7/1/2014	3Q14		28	35	60	0.0	0.1	19.2	0.0
7/8/2014	3Q14		45	42	65	0.0	0.0	20.8	0.0
7/18/2014	3Q14		30	43	56	0.0	0.7	19.6	0.0
7/24/2014	3Q14		42	34	46	0.0	0.3	20.3	0.0
7/31/2014	3Q14		40	75	93	0.0	0.7	20.1	0.0
8/6/2014	3Q14		40	70	64	0.0	0.0	20.1	0.0
9/24/2014	3Q14		22	15	10	0.0	0.8	19.9	0.0
12/12/2014	4Q14		111	123	80	0.0	0.1	20.8	0.0
1/30/2015	Monthly		135	75	60	0.0	0.3	20.3	0.0
2/24/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)
11/27/2013	Monthly	PVT 17	--	43	--	0.0	0.3	21.8	0.0
12/17/2013	Monthly		44	76	70	0.0	0.2	17.9	0.0
12/23/2013	Monthly		78	46	31	0.0	0.2	21.7	0.0
1/29/2014	Monthly		33	80	135	0.0	0.0	21.4	0.0
2/25/2014	Monthly		71	73	77	0.0	0.3	21.2	0.0
3/27/2014	Monthly		64	110	151	0.0	0.0	21.1	0.0
4/24/2014	Monthly		100	161	210	0.0	0.0	21.0	0.0
6/26/2014	2Q14		1	1	1	0.0	0.0	20.0	0.0
7/1/2014	3Q14		45	40	94	0.0	0.0	19.1	0.0
7/8/2014	3Q14		108	120	118	0.0	0.3	20.4	0.0
7/18/2014	3Q14		60	53	90	0.0	3.5	16.8	0.0
7/24/2014	3Q14		124	126	55	0.0	1.4	19.4	0.0

TABLE 2

PASSIVE VENTILATION TRENCH MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA

Date	Event	Location	Velocity (ft/min)			Gas Quality/Combustible Gas Concentrations			
			Front	Middle	Back	Methane % <sup>1</sup>	CO2 % <sup>1</sup>	O2 % <sup>1</sup>	H2S PPM <sup>2</sup>
7/31/2014	3Q14		27	60	47	0.0	1.5	19.4	0.0
8/6/2014	3Q14		56	88	116	0.0	0.9	18.4	0.0
9/24/2014	3Q14		20	22	15	0.0	0.8	19.9	0.0
12/12/2014	4Q14		131	150	95	0.0	0.1	20.9	0.0
1/30/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)
2/24/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)
11/27/2013	Monthly	PVT 18	--	151	--	0.0	0.4	19.8	0.0
12/17/2013	Monthly		52	53	53	0.0	0.1	17.7	0.0
12/23/2013	Monthly		74	125	159	0.0	0.3	20.1	0.0
1/29/2014	Monthly		25	5	44	0.0	0.3	19.5	0.0
2/25/2014	Monthly		--	--	--	0.0	0.4	21.1	0.0
3/27/2014	Monthly		31	10	78	0.0	0.0	20.9	0.0
4/24/2014	Monthly		70	117	130	0.0	0.0	21.3	0.0
6/26/2014	2Q14		3	3	6	0.0	0.0	20.3	0.0
7/1/2014	3Q14		13	15	40	0.0	1.1	16.7	0.0
7/8/2014	3Q14		24	21	2	0.0	0.8	19.6	0.0
7/18/2014	3Q14		43	56	40	0.1	3.0	17.1	0.0
7/24/2014	3Q14		18	31	29	0.0	2.3	18.2	0.0
7/31/2014	3Q14		68	37	50	0.0	7.9	12.5	0.0
8/6/2014	3Q14		32	24	25	0.0	0.0	19.9	0.0
9/24/2014	3Q14		51	57	52	0.7	12.9	5.2	0.0
12/12/2014	4Q14		(3)	(3)	(3)	(3)	(3)	(3)	(3)
1/30/2015	Monthly		160	161	108	0.0	0.1	19.5	0.0
2/24/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)
11/27/2013	Monthly	PVT 19	--	18	--	0.4	1.8	19.0	0.0
12/17/2013	Monthly		30	30	50	0.0	0.4	17.3	0.0
12/23/2013	Monthly		87	78	28	0.0	0.1	20.4	0.0
1/29/2014	Monthly		90	110	58	0.1	0.1	22.5	0.0
2/25/2014	Monthly		--	--	--	0.0	0.9	20.4	0.0
3/27/2014	Monthly		55	33	71	0.0	0.0	20.4	0.0
4/24/2014	Monthly		38	30	54	0.0	0.0	20.9	0.0
6/26/2014	2Q14		19	6	31	0.0	0.0	18.6	0.0
7/1/2014	3Q14		21	7	24	0.0	0.0	19.1	0.0
7/8/2014	3Q14		9	7	10	0.0	0.1	20.7	0.0
7/18/2014	3Q14		10	22	18	0.0	0.0	21.0	0.0
7/24/2014	3Q14		27	75	48	0.0	0.3	20.3	0.0
7/31/2014	3Q14		38	25	55	0.0	2.5	18.0	0.0
8/6/2014	3Q14		19	34	50	0.0	0.0	20.0	0.0
8/13/2014	3Q14		4	33	44	0.0	6.1	14.7	0.0
8/20/2014	3Q14		16	19	32	0.0	9.0	10.0	0.0
8/29/2014	3Q14		2	2	3	0.2	6.7	12.8	0.0
9/4/2014	3Q14		83	57	30	1.3	6.3	13.2	0.0
9/11/2014	3Q14		48	67	32	0.0	0.0	21.4	0.0

TABLE 2

PASSIVE VENTILATION TRENCH MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA

Date	Event	Location	Velocity (ft/min)			Gas Quality/Combustible Gas Concentrations			
			Front	Middle	Back	Methane % <sup>1</sup>	CO2 % <sup>1</sup>	O2 % <sup>1</sup>	H2S PPM <sup>2</sup>
9/24/2014	3Q14		21	26	16	0.6	14.2	4.0	0.0
12/12/2014	4Q14		35	26	35	0.0	0.7	20.2	0.0
1/30/2015	Monthly		31	81	70	0.0	0.1	19.3	0.0
2/24/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)
11/27/2013	Monthly	PVT 20	--	63	--	0.0	0.2	20.8	0.0
12/17/2013	Monthly		85	150	148	0.0	1.3	16.4	0.0
12/23/2013	Monthly		50	9	13	0.0	1.0	19.5	0.0
1/29/2014	Monthly		6	6	26	0.0	1.1	21.5	0.0
2/25/2014	Monthly		--	--	--	0.0	0.8	21.2	0.0
3/27/2014	Monthly		50	24	53	0.0	0.0	20.7	0.0
4/24/2014	Monthly		54	45	73	0.0	0.0	20.8	0.0
6/26/2014	2Q14		8	7	10	0.0	0.0	20.3	0.0
7/1/2014	3Q14		18	8	30	0.0	0.0	19.0	0.0
7/8/2014	3Q14		7	6	20	0.0	0.2	20.5	0.0
7/18/2014	3Q14		23	24	26	0.1	2.4	18.0	0.0
7/24/2014	3Q14		50	31	29	0.0	3.2	16.4	0.0
7/31/2014	3Q14		38	29	21	0.0	6.5	13.9	0.0
8/6/2014	3Q14		14	26	50	0.0	1.4	18.4	0.0
8/13/2014	3Q14		29	38	39	0.0	0.0	20.7	0.0
8/20/2014	3Q14		26	5	21	0.0	1.9	18.2	0.0
8/29/2014	3Q14		2	3	5	0.0	6.1	15.0	0.0
9/4/2014	3Q14		3	31	32	0.6	13.4	7.0	0.0
9/11/2014	3Q14		69	37	82	1.5	1.7	19.4	0.0
9/19/2014	3Q14		22	13	12	0.0	0.0	21.9	0.0
9/24/2014	3Q14		51	56	49	0.0	13.2	5.4	0.0
12/12/2014	4Q14		(3)	(3)	(3)	(3)	(3)	(3)	(3)
1/30/2015	Monthly		85	83	74	0.0	0.3	20.4	0.0
2/24/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)
11/27/2013	Monthly	PVT 21	--	35	--	0.0	0.7	20.1	0.0
12/17/2013	Monthly		25	27	35	0.0	0.1	17.2	0.0
12/23/2013	Monthly		152	76	31	0.0	0.1	20.4	0.0
1/29/2014	Monthly		12	1	75	0.0	1.9	20.3	0.0
2/25/2014	Monthly		--	--	--	0.0	1.1	20.8	0.0
3/27/2014	Monthly		15	21	17	0.0	0.0	20.6	0.0
4/24/2014	Monthly		50	54	221	0.0	0.1	20.8	0.0
6/26/2014	2Q14		24	6	6	0.1	0.0	20.3	0.0
7/1/2014	3Q14		9	28	40	0.0	0.3	18.5	0.0
7/8/2014	3Q14		0	3	19	0.0	0.3	20.4	0.0
7/18/2014	3Q14		52	32	58	0.0	4.0	16.1	0.0
7/24/2014	3Q14		3	0	3	0.0	4.1	15.8	0.0
7/31/2014	3Q14		4	9	8	0.0	9.3	11.1	0.0
8/6/2014	3Q14		1	24	16	0.0	3.4	16.3	0.0
9/24/2014	3Q14		51	59	44	0.0	4.4	16.1	0.0

TABLE 2

PASSIVE VENTILATION TRENCH MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA

Date	Event	Location	Velocity (ft/min)			Gas Quality/Combustible Gas Concentrations			
			Front	Middle	Back	Methane % <sup>1</sup>	CO2 % <sup>1</sup>	O2 % <sup>1</sup>	H2S PPM <sup>2</sup>
12/12/2014	4Q14		2	28	50	0.1	1.2	19.5	0.0
1/30/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)
2/24/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)
1/30/2015	Monthly	PVT22	62	41	85	0.0	0.1	20.1	0.0
2/24/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)
1/30/2015	Monthly	PVT23	39	40	30	0.0	0.1	20.2	0.0
2/24/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)
1/30/2015	Monthly	PVT24	31	50	43	0.0	1.2	17.4	0.0
2/24/2015	Monthly		24	31	6	0.0	2.7	17.0	0.0
1/30/2015	Monthly	PVT25	70	64	84	0.0	0.1	19.0	0.0
2/24/2015	Monthly		92	78	75	0.0	2.1	17.2	0.0
1/30/2015	Monthly	PVT26	56	36	84	0.0	0.1	20.3	0.0
2/24/2015	Monthly		110	106	135	0.0	0.7	20.6	0.0
1/30/2015	Monthly	PVT27	66	60	75	0.0	0.1	22.7	0.0
2/24/2015	Monthly		85	111	170	0.0	0.2	20.7	0.0
1/30/2015	Monthly	PVT28	28	20	25	0.0	0.1	21.9	0.0
2/24/2015	Monthly		120	100	145	0.0	0.1	20.6	0.0
1/30/2015	Monthly	PVT29	56	36	84	0.0	0.1	20.3	0.0
2/24/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)
1/30/2015	Monthly	PVT30	128	145	110	0.0	0.8	19.2	0.0
2/24/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)
1/30/2015	Monthly	PVT31	233	190	96	0.0	0.3	21.1	0.0
2/24/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)
1/30/2015	Monthly	PVT32	215	228	245	0.0	0.1	20.6	0.0
2/24/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)
1/30/2015	Monthly	PVT33	419	366	250	0.0	0.1	19.6	0.0
2/24/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)
1/30/2015	Monthly	PVT34	150	128	121	0.0	0.1	20.0	0.0
2/24/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)

TABLE 2

PASSIVE VENTILATION TRENCH MONITORING DATA  
HIMCO SITE  
ELKHART, INDIANA

Date	Event	Location	Velocity (ft/min)			Gas Quality/Combustible Gas Concentrations			
			Front	Middle	Back	Methane % <sup>1</sup>	CO2 % <sup>1</sup>	O2 % <sup>1</sup>	H2S PPM <sup>2</sup>
1/30/2015	Monthly	PVT35	270	142	261	0.0	0.1	20.6	0.0
2/24/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)
1/30/2015	Monthly	PVT36	206	230	220	0.0	0.1	20.3	0.0
2/24/2015	Monthly		(4)	(4)	(4)	(4)	(4)	(4)	(4)

## Notes:

1- Percent by volume

2- parts per million

(3) - Remedial construction activities impeded access at time of monitoring

(4) - No access due to presence of ice

(5) - Not measured; cap frozen

-- No reading/Not monitored

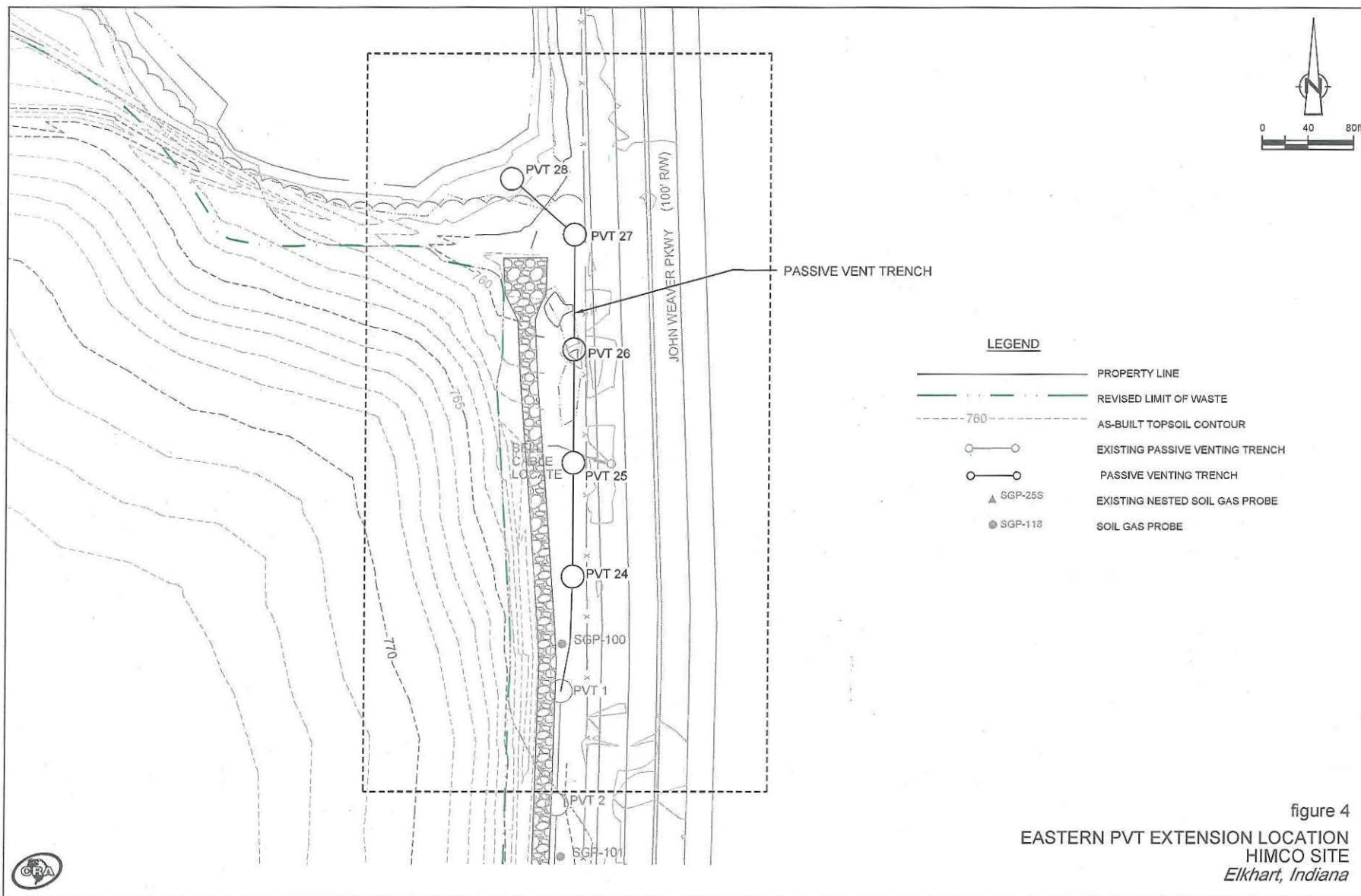
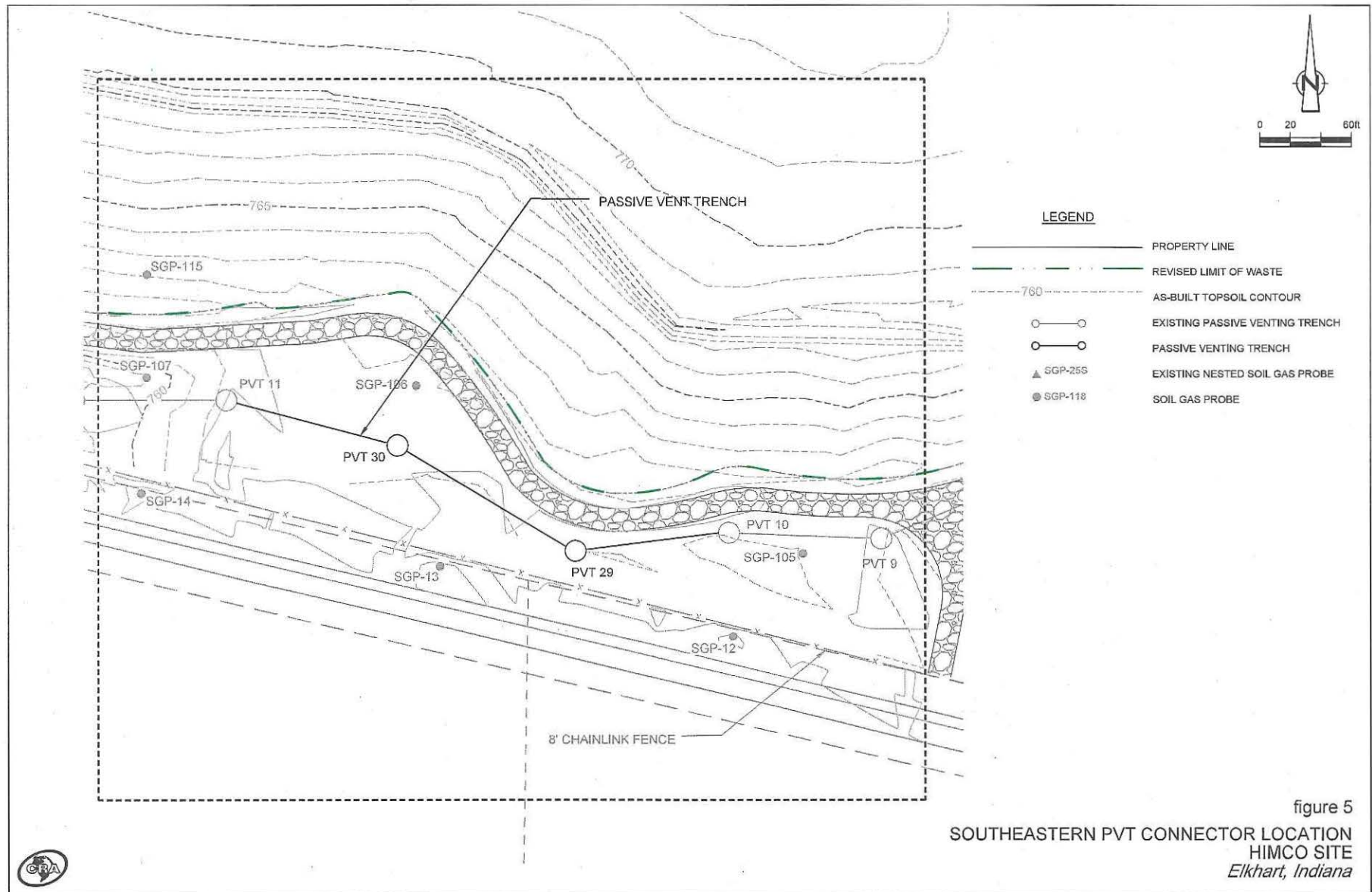
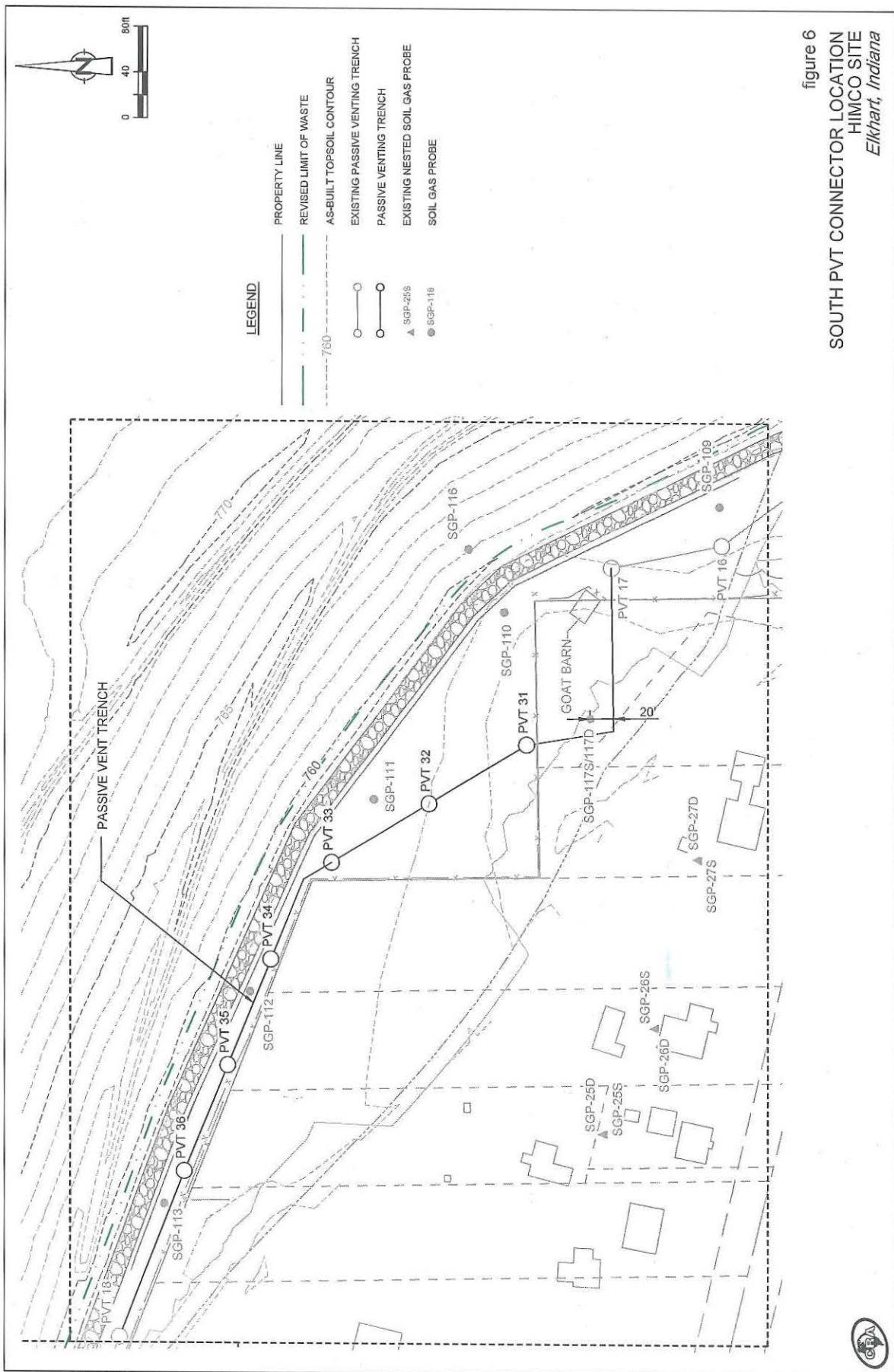
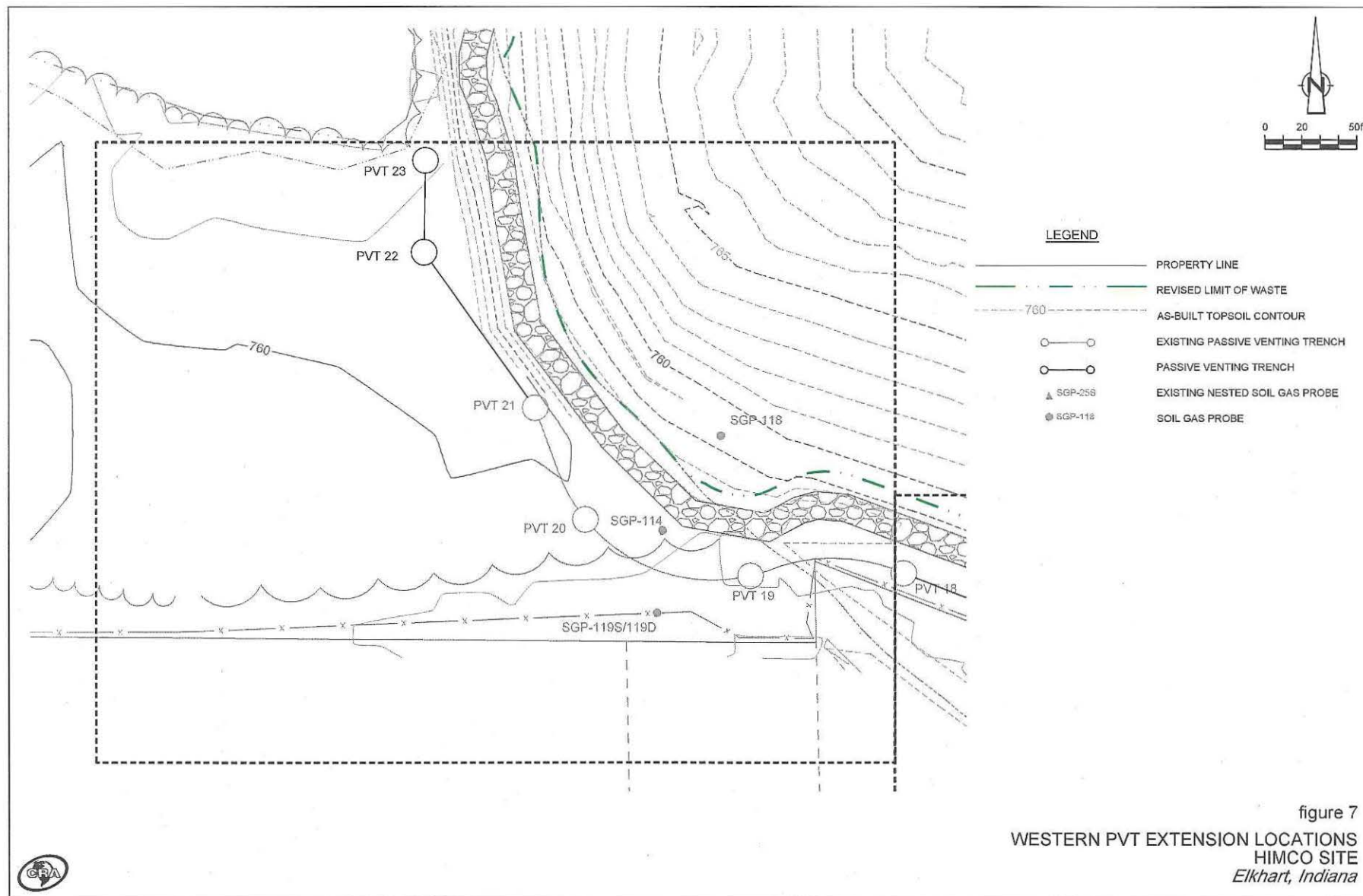


figure 4  
EASTERN PVT EXTENSION LOCATION  
HIMCO SITE  
Elkhart, Indiana









**ATTACHMENT 6: 2012 UPDATES ON REMAINING PROPERTIES REQUIRING ERC'S  
HAS BEEN REDACTED – FOUR PAGES**

**CONTAINS POTENTIAL PERSONALLY- IDENTIFYING INFORMATION**

## Attachment 7

Notification on Conducting Five-Year Review



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

March 4, 2015

Douglas Petroff, Environmental Manager  
IDEM  
100 North Senate Avenue  
Indianapolis, IN 46204-2251

Re: Himco Dump Superfund Site, Elkhart, IN  
Notification of Five-Year Review Start

Dear Mr. *Doug* Petroff:

This letter is to notify you that the United States Environmental Protection Agency (EPA) is beginning the process of working on the initial five-year review for the Himco Dump Superfund Site in Elkhart, Indiana. This review for the Site will be conducted according to the requirements of Section 121 of CERCLA, as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA). Its objective is to evaluate the remedy implemented at the site and determine if it remains protective of human health and the environment.

The five-year review report is due no later than March 2016. We are providing you this notification so that EPA and IDEM can begin the necessary coordination activities. At the earliest convenience, I would like to discuss key action items with you, such as the site inspection, issuance of the required public notice, getting input from the public, and any other issues that are of concern to you.

I look forward working with you on this next five-year review for Himco Dump. If you have any questions, you can reach me at (312) 886-6195.

Sincerely,

A handwritten signature in black ink, appearing to read "R. del Rosario", is written over the word "Sincerely,".

Ross del Rosario  
Remedial Project Manager

Cc: John Matson, ORC  
Chris Fassero, CoE  
Teresa Jones, CIC

## Attachment 8

### FYR Inspection Report

**Five-Year Review Site Inspection Checklist**  
**Himco Dump Superfund Site, Elkhart, IN**  
**June 30, 2015**

(Working document for site inspection. Information may be completed by hand and attached to the Five-Year Review report as supporting documentation of site status. "N/A" refers to "not applicable.")

I. SITE INFORMATION	
Site name: Himco Site	Date of inspection: June 30, 2015
Location and Region: Elkhart, Indiana, 46516, USEPA Region 5	EPA ID: CERCLA IND 980500292
Agency, office, or company leading the five-year review: USEPA	Weather/temperature: overcast, warm and humid
<b>Remedy Includes: (Check all that apply)</b> <div style="display: flex; justify-content: space-between;"> <div> <input checked="" type="checkbox"/> Landfill cover/containment  <input checked="" type="checkbox"/> Access controls  <input checked="" type="checkbox"/> Institutional controls            Groundwater pump and treatment            Surface water collection and treatment  <input checked="" type="checkbox"/> Other    Soil Gas Control    Water Supply Replacement         </div> <div>           Monitored natural attenuation            Groundwater containment            Vertical barrier walls         </div> </div>	
<b>Attachments:</b> Inspection team roster attached                      Site map attached	
II. INTERVIEWS (Check all that apply)	
<b>1. O&amp;M site manager:</b> Josh Decktor                      Himco Trust Representative                      6/30/2015 <div style="display: flex; justify-content: space-between;"> <div>Name</div> <div>Title</div> <div>Date</div> </div> Interviewed at site Phone no. 862-404-6292 Problems, suggestions; see Report attached - July 29, 2015 Summary of Site Meeting.	
<b>2. O&amp;M staff:</b> Alan Van Norman                      Consultant to Himco Trust                      6/30/2015 <div style="display: flex; justify-content: space-between;"> <div>Name</div> <div>Title</div> <div>Date</div> </div> Interviewed at site Phone no. 519 884 0510 Problems, suggestions; see Report attached - July 29, 2015 Summary of Site Meeting	

*PRR*  
*8/6/2015*

3. **Local regulatory authorities and response agencies** (i.e., State and Tribal offices, emergency response office, police department, office of public health or environmental health, zoning office, recorder of deeds, or other city and county offices, etc.) Fill in all that apply.

Agency: U.S. EPA

Contact: Ross del Rosario

Remedial Project Manager

6/30/2015

312-886-6195

Name

Title

Date

Phone no.

Problems; suggestions; See Report attached

Agency: Indiana Department of Environmental Management

Contact: Doug Petroff

Site Manager

6/30/2015

317-234-7179

Name

Title

Date

Phone no.

Problems; suggestions: See Report attached

Agency U.S. Army - Corps of Engineers

Contact: Christopher Fassero/Don Moses

6/30/2015

402-995-2679

Names

Title

Date

Phone no.

Problems; suggestions; See Report attached

4. **Other interviews (optional):** See Report attached.



III. ON-SITE DOCUMENTS & RECORDS VERIFIED (Check all that apply)				
1.	<b>O&amp;M Documents</b> <input checked="" type="checkbox"/> O&M manual <input checked="" type="checkbox"/> As-built drawings Maintenance logs	<input checked="" type="checkbox"/> Readily available <input checked="" type="checkbox"/> Readily available <input checked="" type="checkbox"/> Readily available	<input checked="" type="checkbox"/> Up to date <input checked="" type="checkbox"/> Up to date <input checked="" type="checkbox"/> Up to date	N/A N/A N/A
Remarks: USEPA/USACE/IDEM have received all site related documents in previous submissions				
2.	<b>Site-Specific Health and Safety Plan</b> Contingency plan/emergency response plan Remarks: Previously submitted to USEPA	<input checked="" type="checkbox"/> Readily available Readily available	<input checked="" type="checkbox"/> Up to date Up to date	N/A <input checked="" type="checkbox"/> N/A
3.	<b>O&amp;M and OSHA Training Records</b> Remarks:	Readily available	Up to date	<input checked="" type="checkbox"/> N/A
4.	<b>Permits and Service Agreements</b> Air discharge permit Effluent discharge Waste disposal, POTW Other permits Sediment and erosion control Remarks: Not applicable to O&M activity	Readily available Readily available Readily available Readily available	Up to date Up to date Up to date Up to date	<input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A
5.	<b>Gas Generation Records</b> Remarks: Soil gas distribution records all submitted to USEPA	Readily available	Up to date	<input checked="" type="checkbox"/> N/A
6.	<b>Settlement Monument Records</b> Remarks:	Readily available	Up to date	<input checked="" type="checkbox"/> N/A
7.	<b>Groundwater Monitoring Records</b> Remarks: USEPA/USACE/IDEM have received all site related monitoring records	<input checked="" type="checkbox"/> Readily available	<input checked="" type="checkbox"/> Up to date	G N/A
8.	<b>Leachate Extraction Records</b> Remarks:	Readily available	Up to date	<input checked="" type="checkbox"/> N/A
9.	<b>Discharge Compliance Records</b> Air Water (effluent) Remarks:	Readily available Readily available	Up to date Up to date	<input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A
10.	<b>Daily Access/Security Logs</b> Remarks:	Readily available	Up to date	<input checked="" type="checkbox"/> N/A

<b>IV. O&amp;M COSTS</b>																																																															
1.	<b>O&amp;M Organization</b> State in-house                      Contractor for State PRP in-house                      Contractor for PRP Federal Facility in-house           Contractor for Federal Facility Other- Response in progress																																																														
2.	<b>O&amp;M Cost Records</b> G Readily available              G Up to date G Funding mechanism/agreement in place Original O&M cost estimate: _____ G Breakdown attached  <div style="text-align: center;">Total annual cost by year for review period if available</div> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">From _____</td> <td style="width: 10%;">To _____</td> <td style="width: 20%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 20%;">G Breakdown attached</td> </tr> <tr> <td style="text-align: center;">Date</td> <td style="text-align: center;">Date</td> <td style="text-align: center;">Total cost</td> <td></td> <td></td> <td></td> </tr> <tr> <td>From _____</td> <td>To _____</td> <td></td> <td></td> <td></td> <td>G Breakdown attached</td> </tr> <tr> <td style="text-align: center;">Date</td> <td style="text-align: center;">Date</td> <td style="text-align: center;">Total cost</td> <td></td> <td></td> <td></td> </tr> <tr> <td>From _____</td> <td>To _____</td> <td></td> <td></td> <td></td> <td>G Breakdown attached</td> </tr> <tr> <td style="text-align: center;">Date</td> <td style="text-align: center;">Date</td> <td style="text-align: center;">Total cost</td> <td></td> <td></td> <td></td> </tr> <tr> <td>From _____</td> <td>To _____</td> <td></td> <td></td> <td></td> <td>G Breakdown attached</td> </tr> <tr> <td style="text-align: center;">Date</td> <td style="text-align: center;">Date</td> <td style="text-align: center;">Total cost</td> <td></td> <td></td> <td></td> </tr> <tr> <td>From _____</td> <td>To _____</td> <td></td> <td></td> <td></td> <td>G Breakdown attached</td> </tr> <tr> <td style="text-align: center;">Date</td> <td style="text-align: center;">Date</td> <td style="text-align: center;">Total cost</td> <td></td> <td></td> <td></td> </tr> </table>			From _____	To _____				G Breakdown attached	Date	Date	Total cost				From _____	To _____				G Breakdown attached	Date	Date	Total cost				From _____	To _____				G Breakdown attached	Date	Date	Total cost				From _____	To _____				G Breakdown attached	Date	Date	Total cost				From _____	To _____				G Breakdown attached	Date	Date	Total cost			
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3.	<b>Unanticipated or Unusually High O&amp;M Costs During Review Period</b> Describe costs and reasons: None																																																														
<b>V. ACCESS AND INSTITUTIONAL CONTROLS</b> G Applicable    G N/A																																																															
<b>A. Fencing</b>																																																															
1.	<b>Fencing damaged</b> Location shown on site map Remarks: Fence intact, gates secure on 6/30/2015		Gates secured              √N/A																																																												
<b>B. Other Access Restrictions</b>																																																															
1.	<b>Signs and other security measures</b> Remarks: Sign in place on 6/30/2015		√ Location shown on site map              N/A																																																												

**C. Institutional Controls (ICs)**

1.	<b>Implementation and enforcement</b>		
	Site conditions imply ICs not properly implemented	G Yes	<input checked="" type="checkbox"/> No G N/A
	Site conditions imply ICs not being fully enforced	G Yes	<input checked="" type="checkbox"/> No G N/A
	Type of monitoring (e.g., self-reporting, drive by) Assessed as part of monthly progress report _____		
	Frequency <u>monthly</u>		
	Responsible party/agency <u>O&amp;M Staff</u>		
	Contact <u>Alan Van Norman</u>	O&M Staff	August 5, 2015 519 884 01510
	Name	Title	Date Phone no.
	Reporting is up-to-date	<input checked="" type="checkbox"/> Yes	No N/A
	Reports are verified by the lead agency	Yes	No <input checked="" type="checkbox"/> N/A
	Specific requirements in deed or decision documents have been met	Yes	<input checked="" type="checkbox"/> No N/A
	Violations have been reported	Yes	No <input checked="" type="checkbox"/> N/A
	Other problems or suggestions: <input checked="" type="checkbox"/> Report attached		
	Ongoing issue of completeness – see July 29, 2015 letter attached _____		
	_____		
	_____		

2.	<b>Adequacy</b>	<input checked="" type="checkbox"/> ICs are adequate	ICs are inadequate	N/A
	Remarks _____			
	_____			

**D. General**

1.	<b>Vandalism/trespassing</b>	Location shown on site map	<input checked="" type="checkbox"/> No vandalism evident
	Remarks _____		
	_____		
2.	<b>Land use changes on site</b>	<input checked="" type="checkbox"/> N/A	
	Remarks _____		
	_____		
3.	<b>Land use changes off site</b>	<input checked="" type="checkbox"/> N/A	
	Remarks: None known _____		
	_____		

**VI. GENERAL SITE CONDITIONS**

<b>A. Roads</b>	G Applicable	G N/A
1.	<b>Roads damaged</b>	G Location shown on site map <input checked="" type="checkbox"/> Roads adequate N/A
	Remarks _____	
	_____	

<b>B. Other Site Conditions</b>			
Remarks _____ _____ _____ _____ _____			
<b>VII. LANDFILL COVERS</b> G Applicable    G N/A			
<b>A. Landfill Surface</b>			
1.	<b>Settlement</b> (Low spots) Areal extent <u>limited</u> Depth <u>shallow</u> Remarks <u>To be determined by survey</u>	Location shown on site map Settlement not evident	
2.	<b>Cracks</b> Lengths _____    Widths _____    Depths _____ Remarks _____	Location shown on site map ✓ Cracking not evident	
3.	<b>Erosion</b> Areal extent _____ Remarks _____	Location shown on site map Depth _____ ✓ Erosion not evident	
4.	<b>Holes</b> Areal extent _____ Remarks _____	Location shown on site map Depth _____ ✓ Holes not evident	
5.	<b>Vegetative Cover</b> ✓ Grass    ✓ Cover properly established    ✓ No signs of stress G Trees/Shrubs (indicate size and locations on a diagram) Remarks _____		
6.	<b>Alternative Cover</b> (armored rock, concrete, etc.)    ✓ N/A Remarks _____		
7.	<b>Bulges</b> Areal extent _____ Remarks _____	G Location shown on site map Height _____ ✓ Bulges not evident	

8.	<b>Wet Areas/Water Damage</b> <input checked="" type="checkbox"/> Wet areas Ponding Seeps Soft subgrade Remarks – To be determined by survey	Wet areas/water damage not evident Location shown on site map Location shown on site map Location shown on site map Location shown on site map	Areal extent _____ Areal extent _____ Areal extent _____ Areal extent _____
9.	<b>Slope Instability</b> Areal extent _____ Remarks _____	Slides Location shown on site map	<input checked="" type="checkbox"/> No evidence of slope instability
<b>B. Benches</b> Applicable <input checked="" type="checkbox"/> N/A (Horizontally constructed mounds of earth placed across a steep landfill side slope to interrupt the slope in order to slow down the velocity of surface runoff and intercept and convey the runoff to a lined channel.)			
1.	<b>Flows Bypass Bench</b> Remarks _____	Location shown on site map	N/A or okay
2.	<b>Bench Breached</b> Remarks _____	Location shown on site map	N/A or okay
3.	<b>Bench Overtopped</b> Remarks _____	Location shown on site map	N/A or okay
<b>C. Letdown Channels</b> Applicable <input checked="" type="checkbox"/> N/A (Channel lined with erosion control mats, riprap, grout bags, or gabions that descend down the steep side slope of the cover and will allow the runoff water collected by the benches to move off of the landfill cover without creating erosion gullies.)			
1.	<b>Settlement</b> Areal extent _____ Remarks _____	Location shown on site map Depth _____	No evidence of settlement
2.	<b>Material Degradation</b> Material type _____ Remarks _____	Location shown on site map Areal extent _____	No evidence of degradation
3.	<b>Erosion</b> Areal extent _____ Remarks _____	Location shown on site map Depth _____	No evidence of erosion

4.	<b>Undercutting</b>	Location shown on site map	No evidence of undercutting
	Areal extent _____	Depth _____	
	Remarks _____		
5.	<b>Obstructions</b>	Type _____	No obstructions
	Location shown on site map	Areal extent _____	
	Size _____		
	Remarks _____		
6.	<b>Excessive Vegetative Growth</b>	Type _____	
	No evidence of excessive growth		
	Vegetation in channels does not obstruct flow		
	Location shown on site map	Areal extent _____	
	Remarks _____		
<b>D. Cover Penetrations</b> <input checked="" type="checkbox"/> Applicable    N/A			
1.	<b>Gas Vents</b>	Active <input checked="" type="checkbox"/> Passive	
	<input checked="" type="checkbox"/> Properly secured/locked <input checked="" type="checkbox"/> Functioning <input checked="" type="checkbox"/> Routinely sampled <input checked="" type="checkbox"/> Good condition		
	Evidence of leakage at penetration    Needs Maintenance		
	N/A		
	Remarks Gas vents do not penetrate the cover.		
2.	<b>Gas Monitoring Probes</b>	<input checked="" type="checkbox"/> Properly secured/locked <input checked="" type="checkbox"/> Functioning <input checked="" type="checkbox"/> Routinely sampled <input checked="" type="checkbox"/> Good condition	
	Evidence of leakage at penetration    Needs Maintenance <input checked="" type="checkbox"/> N/A		
	Remarks Three gas probes penetrate the cover		
3.	<b>Monitoring Wells (within surface area of landfill)</b>		
	Properly secured/locked    Functioning    Routinely sampled    Good condition		
	Evidence of leakage at penetration    Needs Maintenance <input checked="" type="checkbox"/> N/A		
	Remarks _____		
4.	<b>Leachate Extraction Wells</b>		
	Properly secured/locked    Functioning    Routinely sampled    Good condition		
	Evidence of leakage at penetration    Needs Maintenance <input checked="" type="checkbox"/> N/A		
	Remarks _____		
5.	<b>Settlement Monuments</b>	Located    Routinely surveyed <input checked="" type="checkbox"/> N/A	
	Remarks _____		

<b>E. Gas Collection and Treatment</b>		✓ Applicable	N/A
1.	<b>Gas Treatment Facilities</b> Flaring                      Thermal destruction                      Collection for reuse Good condition           Needs Maintenance Remarks    No treatment		
2.	<b>Gas Collection Wells, Manifolds and Piping</b> ✓ Good condition    Needs Maintenance Remarks		
3.	<b>Gas Monitoring Facilities (e.g., gas monitoring of adjacent homes or buildings)</b> ✓ Good condition    Needs Maintenance                      N/A Remarks		
<b>F. Cover Drainage Layer</b>		Applicable	N/A
1.	<b>Outlet Pipes Inspected</b> Functioning                      ✓ N/A Remarks		
2.	<b>Outlet Rock Inspected</b> Functioning                      ✓ N/A Remarks		
<b>G. Detention/Sedimentation Ponds</b>		✓ Applicable	G N/A
1.	<b>Siltation</b> Areal extent                      Depth                      ✓ N/A G Siltation not evident Remarks		
2.	<b>Erosion</b> Areal extent                      Depth ✓ Erosion not evident Remarks		
3.	<b>Outlet Works</b> Functioning                      ✓ N/A Remarks		
4.	<b>Dam</b> Functioning                      ✓ N/A Remarks		

<b>H. Retaining Walls</b>		Applicable	√ N/A
1.	<b>Deformations</b> Horizontal displacement _____ Rotational displacement _____ Remarks _____	Location shown on site map _____	Deformation not evident Vertical displacement _____
2.	<b>Degradation</b> Remarks _____	Location shown on site map _____	Degradation not evident
<b>I. Perimeter Ditches/Off-Site Discharge</b>		√ Applicable	N/A
1.	<b>Siltation</b> Areal extent: To be determined by survey Remarks _____	Location shown on site map _____	Siltation not evident Depth _____
2.	<b>Vegetative Growth</b> Vegetation does not impede flow Areal extent: To be determined by survey Remarks _____	Location shown on site map _____	N/A Type _____
3.	<b>Erosion</b> Areal extent _____ Remarks _____	Location shown on site map _____	√ Erosion not evident Depth _____
4.	<b>Discharge Structure</b> Remarks _____	√ Functioning	G N/A
<b>VIII. VERTICAL BARRIER WALLS</b>		Applicable	√ N/A
1.	<b>Settlement</b> Areal extent _____ Remarks _____	Location shown on site map _____	Settlement not evident Depth _____
2.	<b>Performance Monitoring</b> Performance not monitored Frequency _____ Head differential _____ Remarks _____	Type of monitoring _____	Evidence of breaching



IX. GROUNDWATER/SURFACE WATER REMEDIES				Applicable	√ N/A
A. Groundwater Extraction Wells, Pumps, and Pipelines				Applicable	√ N/A
1.	Pumps, Wellhead Plumbing, and Electrical				
	Good condition	All required wells properly operating	Needs Maintenance	N/A	
	Remarks _____				
2.	Extraction System Pipelines, Valves, Valve Boxes, and Other Appurtenances				
	Good condition	Needs Maintenance			
	Remarks _____				
3.	Spare Parts and Equipment				
	Readily available	Good condition	Requires upgrade	Needs to be provided	
	Remarks _____				
B. Surface Water Collection Structures, Pumps, and Pipelines				Applicable	√ N/A
1.	Collection Structures, Pumps, and Electrical				
	G Good condition	G Needs Maintenance			
	Remarks _____				
2.	Surface Water Collection System Pipelines, Valves, Valve Boxes, and Other Appurtenances				
	Good condition	G Needs Maintenance			
	Remarks _____				
3.	Spare Parts and Equipment				
	Readily available	Good condition	Requires upgrade	Needs to be provided	
	Remarks _____				

C. Treatment System		Applicable	√ N/A
1.	<b>Treatment Train (Check components that apply)</b> Metals removal                      Oil/water separation                      Bioremediation Air stripping                                      Carbon adsorbers Filters _____ Additive (e.g., chelation agent, flocculent) _____ Others _____ Good condition                      Needs Maintenance Sampling ports properly marked and functional Sampling/maintenance log displayed and up to date Equipment properly identified Quantity of groundwater treated annually _____ Quantity of surface water treated annually _____ Remarks _____ _____		
2.	<b>Electrical Enclosures and Panels (properly rated and functional)</b> N/A                      Good condition                      Needs Maintenance Remarks _____ _____		
3.	<b>Tanks, Vaults, Storage Vessels</b> N/A                      Good condition                      Proper secondary containment                      Needs Maintenance Remarks _____ _____		
4.	<b>Discharge Structure and Appurtenances</b> N/A                      Good condition                      Needs Maintenance Remarks _____ _____		
5.	<b>Treatment Building(s)</b> N/A                      Good condition (esp. roof and doorways)                      Needs repair Chemicals and equipment properly stored Remarks _____ _____		
6.	<b>Monitoring Wells (pump and treatment remedy)</b> Properly secured/locked                      Functioning                      Routinely sampled                      Good condition All required wells located                      Needs Maintenance                      N/A Remarks _____ _____		
<b>D. Monitoring Data</b>			
1.	Monitoring Data √ Is routinely submitted on time                      √ Is of acceptable quality		
2.	Monitoring data suggests: √ Groundwater plume is effectively contained                      G Contaminant concentrations are declining		

<b>D. Monitored Natural Attenuation</b>			
1.	<b>Monitoring Wells</b> (natural attenuation remedy)		
	Properly secured/locked	Functioning	Routinely sampled
	All required wells located	Needs Maintenance	Good condition
	Remarks		N/A
<b>X. OTHER REMEDIES</b>			
If there are remedies applied at the site which are not covered above, attach an inspection sheet describing the physical nature and condition of any facility associated with the remedy. An example would be soil vapor extraction.			
SVE – all components functioning and in good repair			
Water Main – all components functioning and in good repair			
<b>XI. OVERALL OBSERVATIONS</b>			
<b>A. Implementation of the Remedy</b>			
Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is to accomplish (i.e., to contain contaminant plume, minimize infiltration and gas emission, etc.).			
<u>Site inspection occurred after a period of heavy rainfall; consequently standing water</u> <u>was present in on site ditches and on the landfill cover. Vegetation cover looked good</u> <u>with no obvious signs of vegetative distress. A topographic survey will be completed</u> <u>to assess drainage conditions.</u>			
<b>B. Adequacy of O&amp;M</b>			
Describe issues and observations related to the implementation and scope of O&M procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy.			
<u>Groundwater concentrations of arsenic slightly above action levels persist in the area</u> <u>south east of the site. Groundwater monitoring will continue and a water use survey</u> <u>will be completed to ensure that there is no exposure opportunity.</u>			

<b>C. Early Indicators of Potential Remedy Problems</b>
Describe issues and observations such as unexpected changes in the cost or scope of O&M or a high frequency of unscheduled repairs, that suggest that the protectiveness of the remedy may be compromised in the future.
<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<b>D. Opportunities for Optimization</b>
Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy.
<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>



July 29, 2015

Reference No. 039611

Mr. Rosauro del Rosario  
EPA Project Manager/Coordinator  
United States Environmental Protection Agency (USEPA), Region 5  
77 West Jackson Boulevard  
Chicago, Illinois  
60604

Dear Mr. del Rosario:

**Re: Summary, Five Year Review Meeting, June 30, 2015  
Himco Site, Elkhart, Indiana**

On Tuesday, June 30th at approximately 1:00 p.m. ET, a site meeting and walk through was held at the Himco Site on County Road 10 in Elkhart, Indiana (Site). Present were: Ross del Rosario of U.S. Environmental Protection Agency (USEPA), Doug Petroff of Indiana Department of Environmental Management (IDEM), Chris Fassero and Don Moses of U.S. Army Corps of Engineers (USACE); the Himco Site Trust was represented by Josh Decktor and Scott Krall of Bayer HealthCare and Bayer Corporation, respectively, Christopher Spataro of Faegre Baker Daniels LLP, and Alan Van Norman of CRA. Please note that on July 1, 2015 CRA became GHD.

On behalf of the Performing Settling Defendants (PSDs), collectively known as the Himco Site Trust, GHD offers the following summary of the discussion that occurred during the meeting:

1. A 55 gallon steel drum and a 20 gallon poly tank were staged at the edge of the Site access road located inside of the Site fence directly opposite the main Site entrance gate. Alan Van Norman, GHD, indicated that these were GHD containers used during site monitoring operations and that the containers would be managed at a more appropriate location going forward. (note: the containers have since been relocated)
2. When it rains a lot, as it has in the recent past in Northern Indiana, there can be a tendency for standing water to temporarily accumulate on any site. During the walkover, Don Moses, USACE, identified standing water in some places, but there was no reason for large concern as the vegetation was clearly well established across the Site. Isolated "puddles" defined areas where drainage improvements could be made. USACE suggested that the Himco Site Trust commit in writing that the Himco Site Trust will make drainage improvements using the soil left over from the Passive Ventilation Trench (PVT) extension installation before the issuance of the 5-Year Report. An even better position from the Five Year Review perspective would be if the drainage improvements were completed by the formal issuance date of the Five-Year Review.
3. Groundwater flow has been confirmed as south/southeast for years. There was some discussion about historical conference calls regarding the potential for a groundwater mound to exist under the

landfill; however, all parties agreed that the general groundwater flow direction underlying the Site was to the south/southeast.

4. Ross del Rosario, USEPA, advised everyone that the Himco Site Remediation had won an award for containing all drainage within the Site boundary; a desirable water management feature that is not commonly achieved at Superfund Sites.
5. USEPA suggested that GHD share statistical analysis and recommendations for some of the items, such as arsenic levels in groundwater, that, as USEPA put it, "are not going away fast enough." USEPA also suggested that the Himco Site Trust explore other reasons for the absence of clear downward trends in some parameters and provide further explanations to USEPA. A phone meeting between USEPA and GHD technical staff will be scheduled for early August to further discuss statistical analysis and the trends defined by statistical analysis.
6. Doug Petroff, IDEM, noted that there was a new gas station in the area south east of the Site. New commercial development has a lower potential for exposure to groundwater than residential development. The presence of fire hydrants south of County Road 10 and east of John Weaver Parkway was cited as an indicator of municipal water availability.
7. Ross del Rosario, USEPA, referenced an USEPA letter from "yesterday." (June 29, 2015). The letter addressed several items and USEPA had intended to release the letter well in advance of the Five-Year Review Meeting so that the Himco Site Trust could have been prepared with any questions at the Site meeting. One topic addressed in the letter was USEPA's agreement with the April 24, 2015 Himco Site Trust's proposal to complete a door-to-door survey of properties southeast of the Site to determine if any private water wells remained in use. Also in the context of discussing the letter, USEPA expressed interest in seeing a work plan by the Himco Site Trust referencing a common understanding of groundwater flow and water quality distribution with the objective of achieving an agreed justification for the reduction or even discontinuation of long term groundwater monitoring. USEPA suggested that this would require "keeping minds open getting data to support that levels are low enough and that based on risk, there was not much more to do in terms of monitoring." Furthermore, perhaps it was time to start discussing future site use that would "convert to useful property."
8. Doug Petroff, IDEM, and Alan Van Norman, GHD, briefly discussed future Site uses and that there would be a restriction of "no structures on cap," but ideas of a "wind farm or solar farm" could be possible.
9. The USEPA's June 29, 2015 letter also indicated that there will be one less parameter to monitor in groundwater. Bis-2-ethylhexyl phthalate, an initial chemical of concern, can be deleted from the Groundwater Monitoring Program (GMP) parameter list.
10. There was a discussion of CLD being the one remaining Site property owner holdout who has not signed an Environmental Restrictive Covenant (ERC). Chris Spataro mentioned the past monthly communications, and then quarterly/regular attempts to obtain that last Site ERC without success. The local counsel for CLD Corp (Joel Bowers of Barnes & Thornburg in South Bend) kept indicating that he could not reach his client and/or client's main/Illinois counsel. Chris Spataro will contact John Matson, USEPA Legal in-house Counsel, about CLD, the institutional control hold out. It was discussed that CLD (through Bowers) could be informed that

if an ERC is not voluntarily signed then a "warrant or summons will be issued" especially with the Five-Year Review approaching.

11. Chris Spataro identified that 37 of the 39 east siders have signed ERCs and Access Agreements.
12. Efforts to obtain institutional controls are continuing. Chris Spataro also related his communications/contacts with JP Morgan Chase bank (JPMC) regarding the southside property previously owned by Saleh, then her daughter, Janet Bryan (before foreclosure by JPMC).
13. There was a discussion about obtaining institutional control "guidance" from USEPA.
14. USEPA asked Chris Spataro to consider sharing communications regarding hold-outs who won't sign the institutional controls with USEPA.
15. Don Moses, USACE, requested that he get notice of the September quarterly Site inspection and monitoring.
16. Don Moses, USACE, requested a new topographic survey of the Site. He suggested that elevations be measured on a 50 foot grid. (Note: this request was formalized in a July 8, 2015 email from USEPA)

Please confirm that this summary of June 30, 2015 discussion items is complete. Please send any comments and/or additions to the undersigned.

Sincerely,

GHD



Alan W. Van Norman P. Eng.

AVN/mg/56

# Attachment 9

## Meeting Notes





July 29, 2015

Reference No. 039611

Mr. Rosauero del Rosario  
EPA Project Manager/Coordinator  
United States Environmental Protection Agency (USEPA), Region 5  
77 West Jackson Boulevard  
Chicago, Illinois  
60604

Dear Mr. del Rosario:

**Re: Summary, Five Year Review Meeting, June 30, 2015  
Himco Site, Elkhart, Indiana**

On Tuesday, June 30th at approximately 1:00 p.m. ET, a site meeting and walk through was held at the Himco Site on County Road 10 in Elkhart, Indiana (Site). Present were: Ross del Rosario of U.S. Environmental Protection Agency (USEPA), Doug Petroff of Indiana Department of Environmental Management (IDEM), Chris Fassero and Don Moses of U.S. Army Corps of Engineers (USACE); the Himco Site Trust was represented by Josh Decktor and Scott Krall of Bayer HealthCare and Bayer Corporation, respectively, Christopher Spataro of Faegre Baker Daniels LLP, and Alan Van Norman of CRA. Please note that on July 1, 2015 CRA became GHD.

On behalf of the Performing Settling Defendants (PSDs), collectively known as the Himco Site Trust, GHD offers the following summary of the discussion that occurred during the meeting:

1. A 55 gallon steel drum and a 20 gallon poly tank were staged at the edge of the Site access road located inside of the Site fence directly opposite the main Site entrance gate. Alan Van Norman, GHD, indicated that these were GHD containers used during site monitoring operations and that the containers would be managed at a more appropriate location going forward. (note: the containers have since been relocated)
2. When it rains a lot, as it has in the recent past in Northern Indiana, there can be a tendency for standing water to temporarily accumulate on any site. During the walkover, Don Moses, USACE, identified standing water in some places, but there was no reason for large concern as the vegetation was clearly well established across the Site. Isolated "puddles" defined areas where drainage improvements could be made. USACE suggested that the Himco Site Trust commit in writing that the Himco Site Trust will make drainage improvements using the soil left over from the Passive Ventilation Trench (PVT) extension installation before the issuance of the 5-Year Report. An even better position from the Five Year Review perspective would be if the drainage improvements were completed by the formal issuance date of the Five-Year Review.
3. Groundwater flow has been confirmed as south/southeast for years. There was some discussion about historical conference calls regarding the potential for a groundwater mound to exist under the

landfill; however, all parties agreed that the general groundwater flow direction underlying the Site was to the south/southeast.

4. Ross del Rosario, USEPA, advised everyone that the Himco Site Remediation had won an award for containing all drainage within the Site boundary; a desirable water management feature that is not commonly achieved at Superfund Sites.
5. USEPA suggested that GHD share statistical analysis and recommendations for some of the items, such as arsenic levels in groundwater, that, as USEPA put it, "are not going away fast enough." USEPA also suggested that the Himco Site Trust explore other reasons for the absence of clear downward trends in some parameters and provide further explanations to USEPA. A phone meeting between USEPA and GHD technical staff will be scheduled for early August to further discuss statistical analysis and the trends defined by statistical analysis.
6. Doug Petroff, IDEM, noted that there was a new gas station in the area south east of the Site. New commercial development has a lower potential for exposure to groundwater than residential development. The presence of fire hydrants south of County Road 10 and east of John Weaver Parkway was cited as an indicator of municipal water availability.
7. Ross del Rosario, USEPA, referenced an USEPA letter from "yesterday." (June 29, 2015). The letter addressed several items and USEPA had intended to release the letter well in advance of the Five-Year Review Meeting so that the Himco Site Trust could have been prepared with any questions at the Site meeting. One topic addressed in the letter was USEPA's agreement with the April 24, 2015 Himco Site Trust's proposal to complete a door-to-door survey of properties southeast of the Site to determine if any private water wells remained in use. Also in the context of discussing the letter, USEPA expressed interest in seeing a work plan by the Himco Site Trust referencing a common understanding of groundwater flow and water quality distribution with the objective of achieving an agreed justification for the reduction or even discontinuation of long term groundwater monitoring. USEPA suggested that this would require "keeping minds open getting data to support that levels are low enough and that based on risk, there was not much more to do in terms of monitoring." Furthermore, perhaps it was time to start discussing future site use that would "convert to useful property."
8. Doug Petroff, IDEM, and Alan Van Norman, GHD, briefly discussed future Site uses and that there would be a restriction of "no structures on cap," but ideas of a "wind farm or solar farm" could be possible.
9. The USEPA's June 29, 2015 letter also indicated that there will be one less parameter to monitor in groundwater. Bis-2-ethylhexyl phthalate, an initial chemical of concern, can be deleted from the Groundwater Monitoring Program (GMP) parameter list.
10. There was a discussion of CLD being the one remaining Site property owner holdout who has not signed an Environmental Restrictive Covenant (ERC). Chris Spataro mentioned the past monthly communications, and then quarterly/regular attempts to obtain that last Site ERC without success. The local counsel for CLD Corp (Joel Bowers of Barnes & Thornburg in South Bend) kept indicating that he could not reach his client and/or client's main/Illinois counsel. Chris Spataro will contact John Matson, USEPA Legal in-house Counsel, about CLD, the institutional control hold out. It was discussed that CLD (through Bowers) could be informed that



if an ERC is not voluntarily signed then a "warrant or summons will be issued" especially with the Five-Year Review approaching.

11. Chris Spataro identified that 37 of the 39 east siderers have signed ERCs and Access Agreements.
12. Efforts to obtain institutional controls are continuing. Chris Spataro also related his communications/contacts with JP Morgan Chase bank (JPMC) regarding the southside property previously owned by Saleh, then her daughter, Janet Bryan (before foreclosure by JPMC).
13. There was a discussion about obtaining institutional control "guidance" from USEPA.
14. USEPA asked Chris Spataro to consider sharing communications regarding hold-outs who won't sign the institutional controls with USEPA.
15. Don Moses, USACE, requested that he get notice of the September quarterly Site inspection and monitoring.
16. Don Moses, USACE, requested a new topographic survey of the Site. He suggested that elevations be measured on a 50 foot grid. (Note: this request was formalized in a July 8, 2015 email from USEPA)

Please confirm that this summary of June 30, 2015 discussion items is complete. Please send any comments and/or additions to the undersigned.

Sincerely,

GHD



Alan W. Van Norman P. Eng.

AVN/mg/56

# Attachment 10

## Inspection Photos

Landfill looking south/southwest



Drainage area on northeast



Landfill view from center of site



Vertical pipers, part of PVT gas system



Drainage area on eastern site of landfill



Perimeter road within landfill





Perimeter road within landfill



A Damaged drainage system on the northeast



View of landfill from the southwest



Another view of drainage system to the east



View of landfill to the east



Another view of drainage system



House east of landfill provided alt. water



Another home east of landfill w alt. water



Another home east of landfill w alt. water

